The National Future Farmer

Owned and Published by the Future Farmers of America

August-September, 1960

40 stake models, "six" or V-8 engines to 197 hp.

Bonus-Load pickup bodies give you that *extra* loadspace. Smooth-sided front to back. One-hand opening of tailgate.

Go places, do things ...in comfort and style!

It's fun to step out in an INTERNATIONAL Truck . . . in a pickup with handsome lines, solid comfort *and room*.

Inside the attractive cab, there's ample head room and elbow room for three. All controls are handy for easy, safe driving. Wherever you go, there's complete driver and passenger comfort.

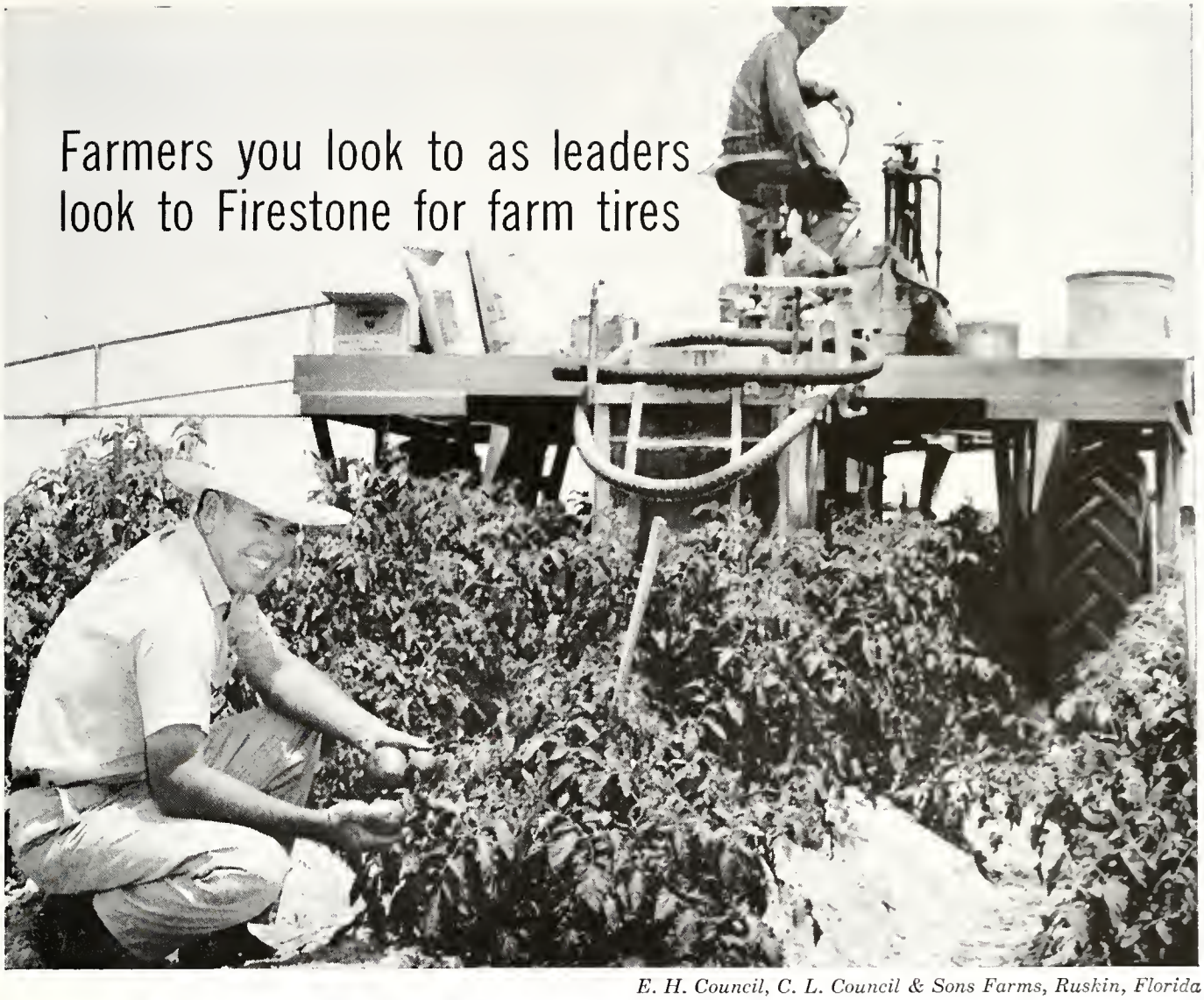
See for yourself . . . with a trial-drive in an INTERNATIONAL. Test its ease of handling, its peppy V-8 power. Stop in at your INTERNATIONAL Dealer or Branch.

International Harvester Co., Chicago
Motor Trucks • Crawler Tractors
Construction Equipment • McCormick® Farm Equipment and Farmall® Tractors

INTERNATIONAL® TRUCKS

WORLD'S MOST COMPLETE LINE

Farmers you look to as leaders look to Firestone for farm tires



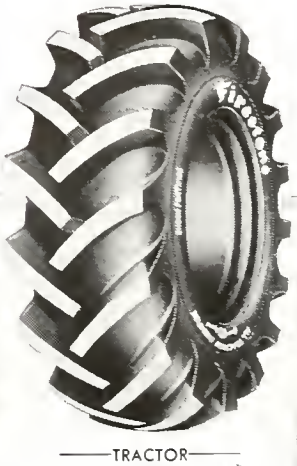
E. H. Council, C. L. Council & Sons Farms, Ruskin, Florida

Nearly every day is harvest day at the C. L. Council & Sons farms near Ruskin, Florida. Vegetables go to market year-round from the Council's 3,000 irrigated acres just east of Tampa Bay. And because of their pioneering work in farm mechanization, irrigation techniques and hybrids, the Council name is among the most prominent in Florida vegetable growing.

The Councils must maintain an exacting hour-to-hour schedule. To do so they rely on an efficient fleet of mechanized equipment—and Firestone tires for every wheel on the fleet.

The Councils count on Firestone tires and service so completely that, according to E. H. Council, their "only tire tool is a telephone." Mr. Council says, "When we want tire service, we call our Firestone man, H. B. Thackston in Bradenton. We can depend on him. And we can depend on Firestone for top quality in any type of tire."

You can get the same top quality in tires and the same fast dependable service by getting in touch with your local Firestone Dealer or Store.



TRACTOR
All Traction Champion*

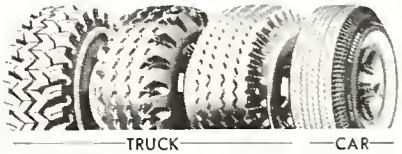
Builder of the first practical pneumatic farm tire

Firestone

BETTER RUBBER FROM START TO FINISH

SAVE AND BE SURE

with Firestone tires on all your wheels!



TRUCK: Super All Traction* · All Traction* · Transport*

CAR: De Luxe Champion*

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*Firestone T.M.

The National
Future Farmer
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OUR COVER—Photo by Bob E. Taylor

Field trips are an integral part of the training in vocational agriculture. Photographer Bob Taylor has captured the mood of one of these classes in our cover picture of Advisor Harold Windram and a group of Future Farmers from the Carrollton Chapter in Ohio. New practices and ideas learned under these true-life conditions are later put to use in their own supervised farming programs.

Address all correspondence to: Box 29, Alexandria, Virginia

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CHANGE OF ADDRESS: Send both old and new addresses to Editorial Offices, THE NATIONAL FUTURE FARMER, Box 29, Alexandria, Virginia.

New chemical compounds are working near-magic for scientific farmers

The amazing new tools that science is giving young farmers

A modern farmer's talk is sprinkled with words like chlordane, antibiotics, hormones, anhydrous ammonia . . .

These words were born in laboratories. They are typical of the amazing new tools that *science* is giving you. Tools that mean bigger and better yields—with less time and effort.

Your mechanical tools will have to keep pace with these scientific tools. They must have the speed and brawn to handle bigger harvests. And, to help you produce more in less time, they must replace muscle with the cheaper, vastly greater power in gasoline and electricity.

Every New Holland machine is *science-designed* to meet modern needs. Take the New Holland concept of Flow-Aetion baling. It lets you handle today's heavier windrows with virtually no possibility of clogging, and with minimum leaf loss. Add New Holland's Bale Thrower—and have one-man baling that is actually faster than a two-man team!

For your needs tomorrow, new machines are already going through their endurance trials in the New Holland test labs and in the field.

When you practice the *science* of farming, New Holland is in step with you—and will *keep* in step in the years to come. New Holland Machine Company Division of Sperry Rand Corporation, New Holland, Pa.

NEW HOLLAND
First in Grassland Farming

PROTECT YOUR FFA CAMPERS

LET US HELP PAY THE MEDICAL BILLS FROM YOUR CAMP, CONVENTION OR OTHER FFA EVENT.

Thousands have benefited from our group policies. Your group con secure this protection too! Low cost . . . prompt courteous service.

WRITE FOR DETAILS

BROTHERHOOD Mutual LIFE Insurance Co.

FORT WAYNE, INDIANA

Kathleen, Georgia

I have just read your June-July issue. I think it is one of the best published. Your story of "The Rodeo Kid" and your explanation of "How to Swim" is very good.

Albert Morton

Spearville, Kansas

In the June-July issue, you illustrate a short way to take notes in college. It is much easier to take notes in college if you have one year of high school shorthand.

Franklin Lorimor

Howe, Indiana

I am a member and officer of the Brighton FFA Chapter. We think your magazine is tops. The articles teach us things about farming in other parts of the country which we can apply to some of our crops.

I am college bound this fall. I enjoyed the article "College Bound?" It sure has helped me.

Bob Holloman

Kingwood, West Virginia

I have received *The National FUTURE FARMER* for about two years and look forward to its coming. I especially like the many interesting articles in this magazine and appreciate the hard work that goes into the printing of it.

Larry Uphold

Lenoir, North Carolina

I wonder if the young people of this country fully realize how fortunate they are in being able to receive a magazine like *The National FUTURE FARMER* . . . I think it is great and *display it with pride* in my collection of good reading material. Two of my sons are members of the FFA.

Mrs. Delbert Oakes

Nicholasville, Kentucky

I would like to congratulate you on the very interesting articles that appeared in the June-July issue: "Farming Without Soil," "Cars of the Future," "Shorthand for Students," and especially "Rabies." I found these different articles very interesting.

Virgil McCuddy

Carey, Idaho

May I take this opportunity to congratulate you and your staff for the fine magazine you turn out. *The National FUTURE FARMER* has encouraged me to strive for better farming projects. The series "Here by the Owl" is very interesting and beneficial.

I also would be willing to pay a higher subscription rate to be able to receive *The National FUTURE FARMER* every month.

Pat Meanea

Sunbury, Pennsylvania

I would like to request permission to reproduce an article in our local newspaper. The article is "Is Vo-Ag Outdated?" by Olen Smith, Advisor, Guthrie, Oklahoma.

T. Dean Witmer, Supervisor
Agriculture Education

Permission granted.—Ed.

Newburg, Pennsylvania

Enclosed you will find a check for a subscription. Send it to Max Swartz, Jr., Route 1, Newburg, Pennsylvania.

I was a member of the Chambersburg, Pennsylvania, FFA Chapter. I graduated in 1954 and have been following all activities of Future Farmers very closely. I enjoy your Magazine very much.

Max is now working for me when not in school and since he thoroughly enjoys farming, and reads magazines, I felt he should be getting your magazine. He'll probably be an FFA member soon.

John Ile, Jr.

D' Hanis, Texas

Where is the money for those 28 jokes I sent you over a month ago? I want at least $16.00 out of it.

Name Withheld

Because of the large number received, jokes cannot be acknowledged or returned. Payment is made only for those published. See footnote on page 50.—Ed.

Perulack, Pennsylvania

I have a son who belongs to the FFA and while reading his magazine I came across an offer of free booklets called: "Let's Go Shooting."

I am a Hunter Safety Instructor and I feel I could put them to good use in our program. Please send me a few.

George M. Garner

Buena Park, California

About 95 percent of our members subscribe. Please let me add that they all enjoy reading it very much and look forward to the arrival of the copies. They wish it could come out more often. Every FFA member should have it each year.

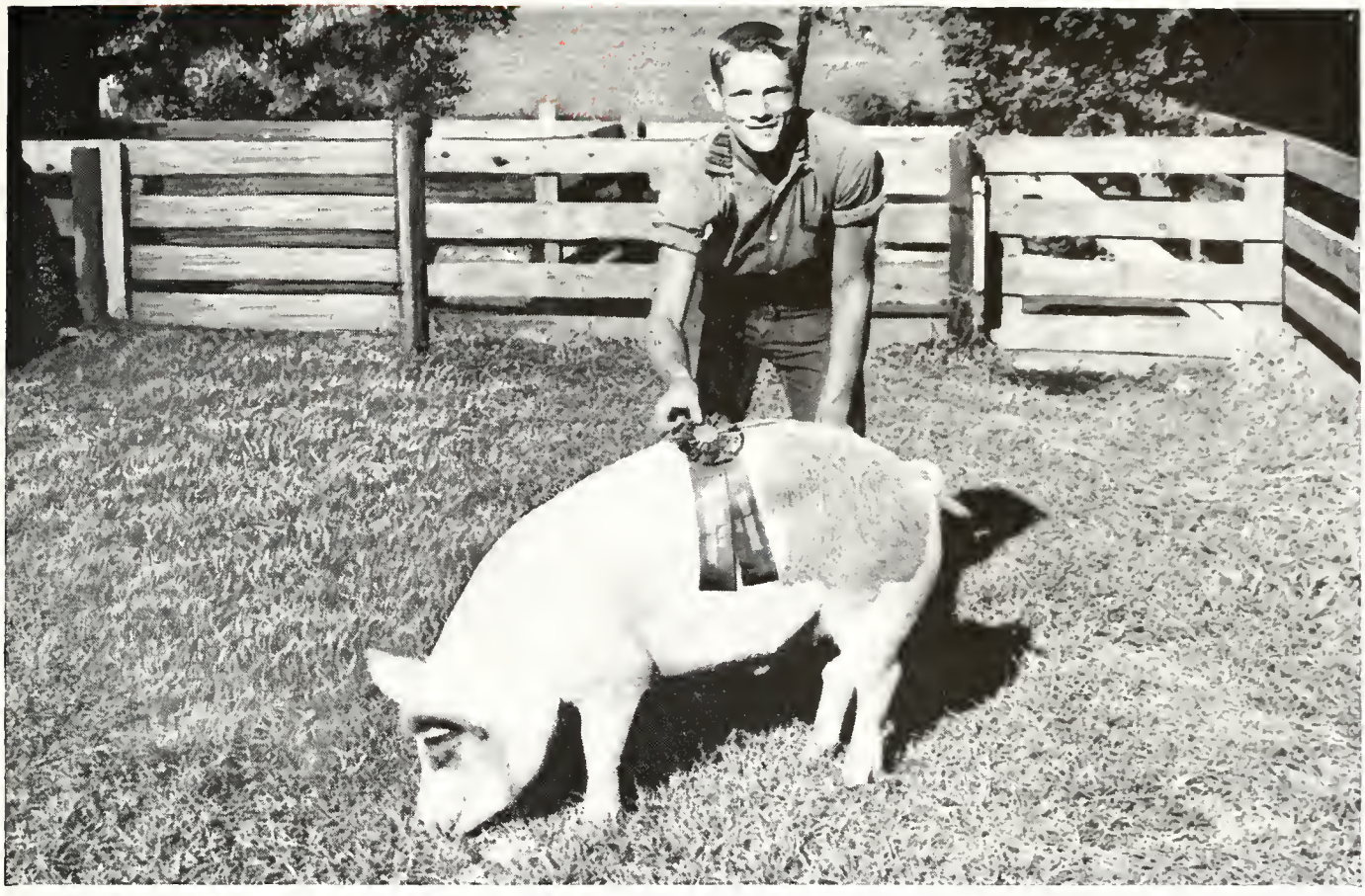
Nuell Lunde
Chapter Advisor

Newton, Illinois

Our 91 FFA members here at Newton subscribed to *The National FUTURE FARMER* last fall—at the same time we paid our state and national dues. We will, in all probability, have 100 percent subscribing next fall. In the meantime, it is useless for you to expend time and materials on *us*. We know that our magazine is one of the best.

Donald G. Clampet
Chapter Advisor

PURINA VISITS ANOTHER "FARMER OF TOMORROW"



Alan Schulz won a Grand Championship, in county-wide competition among farm youths, with his Yorkshire-Hampshire cross market hog.

Youth's projects give him wide livestock experience

A visit to the 120-acre Schulz farm, near Holton, Kansas, reveals Alan Dean Schulz's broad interest in modern farming. You'll see his "Farmer of Tomorrow" projects with dairy and beef cattle, hogs and sheep.

Alan's livestock, which has won several ribbons, including a Grand Championship, is on a commercial scale. Last year, he sold 58 market hogs, increased his dairy herd to 18, including three registered Holsteins, and added a flock of 30 range ewes and a registered Suffolk ram. He is one of seven Kansas boys accepted for a sheep project promoted by a national retailing organization. A herd of registered Angus also is in his plans.

When Alan graduates from Holton High School, where he is a junior, he intends to go to college to study agriculture. After college, he expects to return to farming.

Purina congratulates Alan Dean Schulz on his present success and on his plans for the future.

* * * *

In feeding stock for show or for market, Alan Schulz follows Purina Programs. There's a Purina Dealer in your community who is anxious to help you with feeding and management problems whether you are raising livestock or poultry for exhibition or for market.

FEED PURINA...YOU CAN DEPEND ON THE CHECKERBOARD

QUICKEST CUTTING

The best buy in chain saws for a farmer or rancher is a McCulloch, famous among woodsmen throughout the world for professional quality and dependability.

The new McCullochs are as tough as they come, yet they're light, speedy, and easy to use. Send for new, free literature showing the many practical uses of chain saws for farm chores and timber or pulp cutting. Write McCulloch Corp., 6101 W. Century Blvd., Los Angeles 45, Calif., Dept. NF-1.

Seven new models available now

ONE/41 Direct-drive

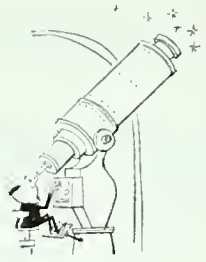
Top value, top power • Weighs only 17 lb. • New Super Pintail® chain • Easy-reach oiler button • Compact body styling

only $149.95 with full 16" bar

NO. 1 IN WORLD SALES

McCULLOCH

CHAIN SAWS



LOOKING AHEAD!

PICK TOMATOES WITH MACHINES?

No, not now. But in the near future you probably will. Both Michigan State University and the University of California have announced the development of a mechanieal tomato harvester. Several problems still will have to be worked out before their use becomes widespread. Intensive research is now underway to solve one of these problems—a tomato variety suitable for mechanical harvesting.

NEW USE FOR GRAINS

A new use for corn, wheat, and grain sorghums has been found—in the paper industry. Chemists have developed a method for adding dialdehyde starch—obtained from these crops—to paper pulp. This improves the wet strength of paper. USDA says up to 1½ million bushels of corn alone could be used each year by the paper industry. Wet strength paper is used for paper towels, facial tissue, outdoor posters, shipping sacks, and similar items.

EGG PRICES SHOULD IMPROVE

Egg priees for the last half of 1960 are expected to be higher than for the first half of the year. Farm egg prices should average about 35 cents a dozen during August and September. Look for 38-39 cent eggs from October through December. These prices are from 4 to 8 cents above the same periods of 1959. The number of layers will probably continue to decline during the months ahead.

CORNCOB SUPPLEMENT SILAGE RATIONS

Beef cows on a corn silage and alfalfa silage ration can produce healthy calves when up to 60 percent of the dry matter is ground corncobs. In Iowa tests, some of the calves were found to be even more healthy than those born to cows getting all silage and no cobs. Two lots of cows that received a ration in whieh 40 percent of the dry matter was cobs produced calves averaging 74 pounds at birth, compared to a 68.2 pound average for calves from cows not getting cobs in their ration.

FARM CREDIT NEEDS WILL INCREASE

Farm operators in the future will have to borrow more money to provide needed operating capital, says F. J. Reis, University of Illinois farm economist. Reis predicts that many farmers, especially young operators, can look ahead to depending on credit for their operating capital. Two and three year intermediate-term loans are now being offered by many lenders to provide this new type of farm credit.

THINGS TO WATCH

Cattle: Slaughter is expected to continue above 1959 levels through the second half of 1960. The large number of cattle on feed April 1—8 percent more than a year earlier—and rate of marketing sinee, indicate heavier slaughter this summer and fall than last year. This is expected to result in modest price declines this summer with little, if any, recovery this fall.

Dairy: Milk prices are running a little above a year ago. Not mueh change in milk prices, other than seasonal ones, is likely the rest of the year.

Hogs: Prices are rising seasonally and have nudged above year ago levels. The peak this summer will be well above the summer of 1959, and prices should stay above last year's by a good margin through 1960.

Broilers: Settings and hatchings have been running 10 to 15 percent above last year's since early April. Marketings are expected to start picking up now. Prices are likely to hold better than last summer, partly because of less competition from pork and demand is expected to strengthen seasonally.

HOME-MADE CATTLE FEEDER SAVES TIME AND MONEY

Roy Spencer (right), who farms more than 400 acres near Downs, Ill., built the automatic auger feeder shown, at a cost of about $70. Feed is dumped in at the end and is distributed in the feeding troughs by the auger. An old car transmission gives the auger variable speeds, including reverse. Mr. Spencer is able to feed 40 head of cattle at a time and save labor — which means *money*. Texaco Representative Frank Dwyer is shown at left.

Roy lubricates his farm machinery with Texaco Marfak because it sticks to bearings better and longer. It forms a collar around open bearings, sealing out grit and dirt. Marfak won't jar off, wash off, melt down and drip out, dry out or cake up. It cushions bearings, adding life to farm machinery.

Get in touch with your Texaco Distributor and order some Marfak today. You'll find *it pays to farm with Texaco products.*

Another inventive farmer votes Texaco!

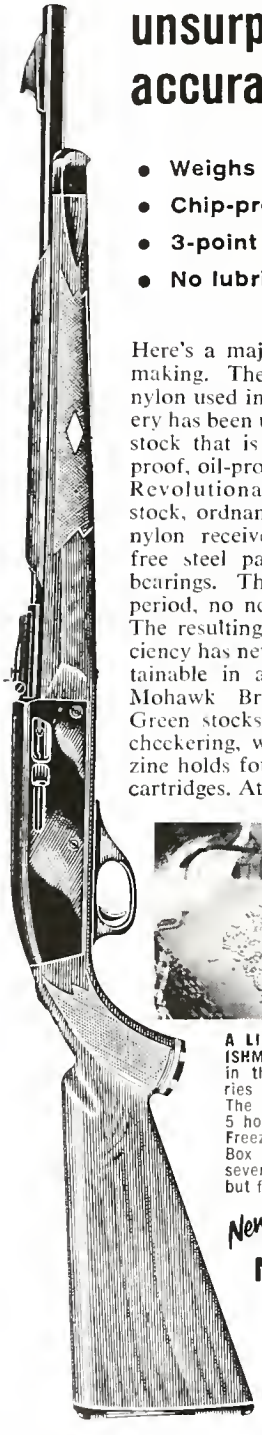
Jerry Pfister, farm manager of the Pfister Hybrid Seed Corn Co., El Paso, Ill., which grows some 240,000 bushels of corn annually on 4,600 acres, finds labor savers worthwhile. One of his father's ideas was putting plank cleats on a tractor, as shown in photograph, to keep the tractor from packing the soil. Another idea was hitching three corn planters together so that one man can plant twelve rows of corn in one operation. Jerry finds Texaco products best for farm machinery. He prefers Advanced Custom-Made Havoline Motor Oil, for example, because it cleans as it lubricates, giving longer engine life.

Mr. Pfister gets his petroleum products from Texaco Distributor Milo Sterritt, of Minonk, Ill. In this photograph, Jerry (right) is talking with Texaco District Manager B. G. Ansorge. Like farmers across the nation, Mr. Pfister agrees that *it pays to farm with Texaco products.*

BUY THE BEST...BUY TEXACO

TUNE IN: TEXACO HUNTLEY-BRINKLEY REPORT, MONDAY THROUGH FRIDAY, NBC-TV

Amazing structural-nylon and ordnance steel design gives new 22 autoloader unsurpassed accuracy



- Weighs just 4 pounds
- Chip-proof, warp-proof
- 3-point bedding
- No lubrication

Here's a major advance in rifle making. The same structural-nylon used in industrial machinery has been used to create a gun stock that is chip-proof, water-proof, oil-proof and warp-proof. Revolutionary integration of stock, ordnance steel barrel and nylon receiver means friction-free steel parts ride on nylon bearings. There's no break-in period, no need for lubrication. The resulting accuracy and efficiency has never before been obtainable in an autoloading 22. Mohawk Brown and Seneca Green stocks have clean, sharp checkering, white inlays. Magazine holds fourteen 22 long rifle cartridges. At your dealer's now.

A LIFETIME OF RIFLE PUNISHMENT was concentrated in the Remington laboratories to test the Nylon 66. The gun was rapid-fired for 5 hours without a jam. The Freeze Box, Heat Box, Rain Box and Dust Box produced severe weather conditions, but failed to clog the action.

New

NYLON 66

$52.95*

**Price subject to change without notice.*

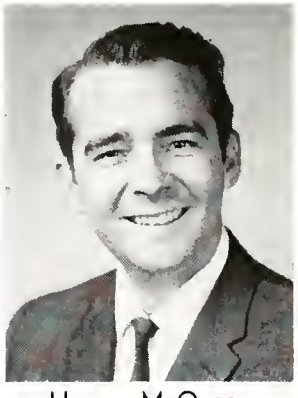
Remington

DUPONT

Remington Arms Company, Inc., Bridgeport 2, Conn. In Canada: Remington Arms of Canada Limited, 36 Queen Elizabeth Blvd., Toronto, Ont.

Your Editors Say . . .

Horace McQueen is a byline you will be seeing frequently in the issues ahead. Horace joined the Magazine staff in June as assistant editor. He will devote his time to keeping abreast of the changes in agriculture and reporting to you those that affect your farming situation. You will also see his byline on articles telling how other Future Farmers are getting established in farming—how they are applying FFA and vo-ag training to become a success at an early age.



Horace McQueen

Horace comes to us from the state of Texas where he earned a degree in agricultural journalism at Texas A&M. He has contributed articles to several leading agricultural publications and worked for a year with the Texas Agricultural Information Office. His timely articles on farm subjects were used by over 600 daily and weekly newspapers in the state and most radio and TV stations.

Horace was born on a farm at Crockett, Texas, and says, "I have always been interested in agriculture." Since his father worked off the farm, their acreage was primarily his responsibility. He was an exhibitor at all area livestock shows and showed the Champion Brahman in the scramble division of the Houston Stock Show in 1956. He was graduated from LaPorte High School before enrolling at A&M.

Like most Texans, Horace is a lover of horses and worked three summers while in college training horses in various parts of the country.

He and his wife, Carole, have a ten-month-old son, Dale.

Joining the advertising staff of the Magazine this month is Lennie Gamage of Cartersville, Virginia. Future Farmers probably remember Lennie as a National FFA Officer in 1955-56 when he was vice president of the Southern Region. His outstanding record in the FFA includes the American Farmer Degree, president of his local chapter and the Virginia Association, and district public speaking honors.

Lennie Gamage

Lennie has maintained his interest in the home farm and was actively engaged in farming when he joined the Magazine staff. He manages 640 acres of rolling Virginia farmland where he runs 65 to 70 head of Angus cattle in addition to his forest and croplands.

In his new role of working for the FFA, Lennie will call on advertisers and advertising agencies and assist them with their advertising programs in *The National FUTURE FARMER*. He will be working with the growing list of advertisers in the eastern and southern states. Lennie is a graduate of Virginia Polytechnic Institute at Blacksburg and at present is single.

In case you are wondering, staff members don't just "fade away" when they leave *The National FUTURE FARMER*. Joe Boyd is now southeastern field editor for *Farm Journal* working out of Montgomery, Alabama. Jimmy Willis has gone with the N. W. Ayer & Son Advertising Agency and makes his headquarters in Charlotte, North Carolina.

Wilson Carnes,

Editor

It happens before enlistment

Meteorological Observer

You choose as a Graduate Specialist

Choose valuable schooling before enlistment. Only high school graduates are eligible. If you pass the qualifications exams, this special Army educational program lets you choose the schooling you want. And your choice is guaranteed before you enlist. (In many fields, Army technical schooling ranks with the world's finest!)

Choose from 107 courses. Successful candidates for the Graduate Specialist Program can choose schooling from 107 up-to-the-minute classroom courses. Meteorology, Auto Mechanics, Electronics, Radar & TV, Missiles, Communications—many more. Here's a chance to get training and experience that pays off for the rest of your life.

Ask your Army recruiter. He'll show you a detailed description of any Graduate Specialist course.

GRADUATE SPECIALIST

US ARMY

new star of the
"WESTERN LOOK"

Lee WESTERNER
as worn by
GUY WEEKS, champion rodeo cowboy

Fast becoming a favorite on any scene, for those who like the Western look—THE NEW LEE WESTERNERS.

Pants are slim-line...sleek and comfortable—cut over famous LEE RIDER patterns. Jacket is form-fitting and full-shouldered for the real outdoors-man.

Westerner's fabric is LEE WESTWEAVE...sturdy, hard-wearing material in Sanforized, polished cotton that's guaranteed all the way.

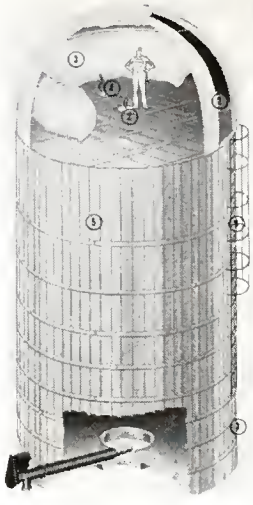
Jacket $5.95 Pants $4.95

Lee Westerners are real popular! If your store doesn't have your size at the moment, ask for a special order.

THE H. D. LEE CO.
GENERAL OFFICES
117 W. 20th ST., KANSAS CITY 41, MO.

something new

New all-auger design silo unloader is reported to handle more silage with less power. Write to Berg Equipment Co., Marshfield, Wisconsin.



"Granustore," new oxygen-free, low-cost sealed storage unit. Use for storing high-moisture grain. A. O. Smith Corp., Kankakee, Illinois.

"Self Kleen'r" pig drinking cup serves up water and cleans itself. Keeps pen floor dry. Write Fairfield Mfg. Co., Fairfield, Iowa.

"Tapec Ditchliner" reduces water seepage loss. Can buy any length and width. Contact Plastics Div., Koppers Co., Inc., Pittsburgh 19, Pa.

"Pocketphone," a compact two-way radio, has two-mile range. Battery lasts year or more. By Globe Electronics, Council Bluffs, Iowa.

Cossman's "Fly Cake" kills flies in twenty seconds. Attracts flies from over a 100 square foot area. Lasts for months. E. Joseph Cossman & Co., 7039 Sunset Blvd., Los Angeles 28, Calif.

Cardiograph of Power!

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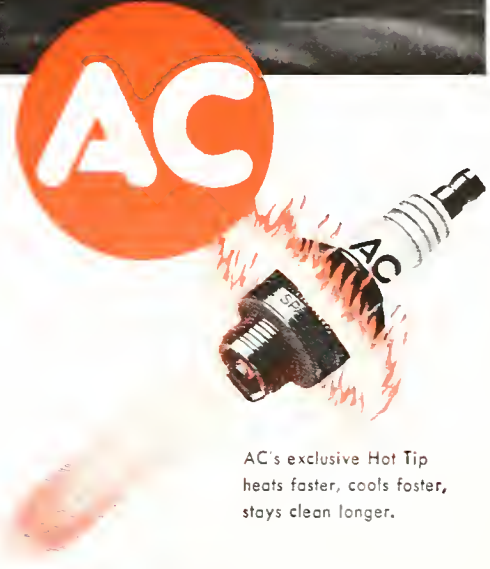

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DAIRYING

A dairy specialist takes a look ahead.

HAS YOUR vo-ag program given you a toe-hold in dairying? Then chances are you want to be a dairy farmer.

You probably have at least 40 years of productive farm life ahead. That means you'll face countless changes and innovations during your career. We went to Texas A&M College's dairy department and asked Head Man I. W. Rupel for his advice to you. We hope it helps you face the challenge of your future in dairying. Here's what he said:

"Tomorrow's dairyman, in many respects, won't change. But there will be startling advances during the next 40 years. For instance, we'll probably see a trend toward testing for milk protein as well as butterfat content. This may even change pay rates for farm-produced milk. Right now, we're testing 150 cows a month to see just what affects a cow's milk protein content and milk-solids-not-fat. A new Watson-Lactometer test is being used which may become standard equipment for DHIA fieldmen.

"The dairy cow will probably change less than her surroundings. I expect show ring standards to remain about the same as today. But there will be much more emphasis on production during your lifetime. During the last ten years, average production per cow has increased by 1,000 pounds. During the next four decades this average may be increased by another 2,000 pounds.

"Milk standards will rise too. It'll get harder to produce acceptable Grade A milk, because of more rigid standards. But many dairy leaders foresee the day when *ALL* milk will be classified Grade A.

"Artificial breeding will become even more popular. A 'tissue culture' technique may even allow us to grow testicular tissue and harvest sperm cells in the laboratory. This would make it possible to use an outstanding bull's services forever—if the bugs are worked out of the system. This isn't all 'dream stuff'—the 'tissue culture' technique is in research use now. But we don't know that it is desirable or that it can be made practicable.

"Many dairymen of the future will continue to raise much of their grass and forage crops. I hope to see the quality of our forages upgraded and predict a much better utilization of forages. Future dairy feeding will continue to use the recent upward trend started with the grain surpluses—America's dairymen are now feeding 2,000 pounds of grain a year per cow. There's a big need for more research in rumen digestion. We need to know more about the potential in cooked or steamed feed for ruminants. Another thing that's sure — tomorrow's dairyman will still need to feed according to production.

"I don't think you and I will see a completely push-button dairy operation. We will see many housing and equipment improvements. While I think the herringbone system discourages fullest individual attention to dairy cows, a modified-herringbone may well be the dairy barn of the future. Disease control will continue to be important. New chemicals will be available for cleaning equipment and floors. Chemical cleaners may become necessary as water gets scarce. Eventually we may salvage dairy cleaning water for irrigation.

"You might compare the dairymen of 1980 to today's medical doctor. He will probably have a well-stocked library of current information. And he will have to use it to keep up with the times.

"Production associations will still play a big part in his life. We may see further infiltration of labor unions into the dairy industry. There are some localities where dairy farm labor is already unionized.

"How can you get in on this future? Well, that's a difficult question. It depends quite a bit on the individual. Let's forget the fellow who inherits a dairy farm or has good family backing. He has already overcome the major hurdle.

"If you're the average Future Farmer, you have a supervised farming program, a small savings account, and a desire to farm.

"By the time you're a full-time dairyman, you'll need 30 or more milking cows and three to five acres for each. Actually your land requirements will vary with fertility and management. You'll need money for housing, equipment, and dairy stock. I would say $50,000 would be somewhat average.

"Chances are you don't have that kind of money. Few young adults do. So your immediate problem is how to get enough money to start dairy farming. How about a bank loan? Fine, but no bank will grant a 100 percent loan. You'll be expected to put up some money of your own. How much? That depends on what you want to do and the fellow you're dealing with. Sometimes your local FHA office manager can be a big help in getting credit. Credit is never impossible for a deserving young farmer. You may be asked to prove yourself and share in the risk. But if there's a good chance of your succeeding, count on backing from a bank, individuals, FHA financing, or some other source of credit. Remember, getting credit is just a matter of selling yourself. And you can reduce the amount of credit needed for your future dairy operation by building a foundation herd as a FFA member.

"There are two schools of thought on getting credit. Some say go to college. Get your maturity and confidence at a place of higher learning while you pick up technical dairying. They say it will develop valuable 'contacts' who can help you get started. Others say, don't go to college. They advise going to work for a dairyman. Save money while you learn by doing, is this argument.

"Both have good points. You probably won't be able to create much of a savings account in college. But, on the other hand, you won't save a fortune while working for wages either. In the long run, I'd say the college man has the edge in these two arguments. You need experience—there's no substitute for that—and financial backing to start a dairy farm."

◆◆◆

DON FEEDS 165 HEAD *in 6 minutes*

Automation provided the answer for this father-son team. Feeding by hand was becoming too big a job for them. So they decided to let machinery do their work.

Don throws the switch and feed starts its journey from the silo to the feed bunks. It saves time and hard work.

AUTOMATION has come to the feedlot of Donald Hewitt, 22-year-old former Future Farmer from Flint, Michigan, who has a push-button feeding system.

The automatic operation offers Don and his dad many advantages on their 335-acre farm. It saves labor, permits more animals to be handled, and reduces the time required to feed an animal to market weight. The Hereford and Angus calves are bought when they weigh 400 pounds and are fed to a weight of 1,100 pounds. With their push-button feeding system and efficient barnyard arrangement, they can send the animals to market after only 10 months on feed, compared to 12 months under their old system.

When Don started talking about making changes in their feedlot, his father was ready to listen. He knew Don, who received the American Farmer Degree in 1959, and was state FFA treasurer in 1956-57, could probably improve their operation.

Don drew some rough designs for the new feedlot. With full backing from his father, who has much experience in feeding cattle, the rough designs soon became reality. The old barnyard grew into one of the most efficient feedlots you could wish for.

The design is simple and practical. With the flick of a switch, measured amounts of feed are drawn from oxygen-free, glass-fused-on-steel silos. Another switch sets bar and screw conveyors into action and the feed is carried to two 60-foot long feeding bunks on the concrete feedlot.

"With the two adjustors in the control room, I can widen the openings which are placed two feet apart in the bunks to any required width," Don explains. "This allows feed to be evenly distributed in the bunks and in exact amounts."

Don believes in getting the right amount of feed to each animal. "If the average weight of the cattle has, for instance, reached 700 pounds, they should receive 2 pounds of feed per 100 pounds of body weight a day," he continues.

"With our herd of 165 head, we have to measure out 165 x 7 x 2 pounds of feed, or 2,310 pounds, if they weigh 700 pounds. The feed comes out of the two silos at about three bushels a minute, so it takes only six minutes to fill the two bunks with the correct amount of feed."

Mr. Hewitt says they could feed twice the number of cattle without having to change the present set-up or hire additional labor simply by lengthening the feed bunks. However, feed would be a problem. At present, they harvest all the feed they use from their farm and sell a small amount besides.

The cattle are bought from a livestock exchange when they weigh about 400 pounds. For the first 60 to 90 days, they are fed on growing feeds, such as "haylage"—meaning silage stored in an airtight silo which prevents it from fermenting—and some mowed hay. Later, their "menu" is gradually changed to more fattening rations such as corn.

Don and his dad are discussing the extension of feed bunks. Notice feed storage arrangement in background.

Some of the high-quality cattle the Hewitts feed. Observe the uniformity of size. Each animal has plenty of space along the feed bunk shown on the left.

"Since we can control the amount of feed our cattle get, we feed no supplementary feed," says Don. "On 165 head this means a savings of $6,200 a year in feed and labor costs."

Cost per pound of gain is now running about 12½ cents, and the selling price is usually around 30 cents—the market varies, of course—so they make a good profit from the 700 pounds they put on each animal during the 10-month period. In addition, the push-button system allows the Hewitts two months of the year for maintenance of equipment and—last but not least—leisure, a luxury for most farmers.

With the equipment the Hewitts employ on their farm, hay can be harvested and stored by the two of them within 36 hours. They plan to buy a hay crusher soon and cut the time to one day. Their airtight silos for "haylage" and corn allow them to store high moisture feed without a chance of deterioration.

High moisture corn—26 to 30 per cent—has a higher nutritive value than mechanically dried corn with a moisture content of about 15 per cent, Don points out. Also, he says this adds about 10 pounds per bushel to the weight.

The push-button feedlot operation has nearly eliminated sickness and bloat in their herd. No change in the quality of cattle they market has been noticed—they still dress out about 62 per cent.

There is no question that automation and the use of modern farm equipment saves the Hewitts considerable time, effort and expense, while producing top-quality beef.

And Don adds, "I firmly believe that automation belongs as much in the barnyard as it does in the factory."

Photos courtesy
Cockshutt Farm Equipment, Ltd.

Feed for the cattle is augered down the center chute and is distributed equally in the adjoining feed bunks.

The Hewitts return from a day's work in the field. Notice the large feed storage unit in the background.

Going To the Convention?

By Jim Thomas
National FFA President

IT'S ONLY a short time until the start of the 1960 National FFA Convention which will be held in Kansas City, Missouri, October 12-14.

If you are selected to go, learn the rules and regulations your National FFA Board of Student Officers and Board of Directors have made.

First of all, attendance this year will be limited to only five members and one advisor from a chapter.

Some members, however, will not be counted in this quota. These are official state delegates, American Farmer Degree candidates, official state judging team members, National FFA Band members, contestants in the National FFA Public Speaking Contest, and regional or national winners of an FFA Foundation award. Wives and parents of FFA members and other adult guests also will not be counted in the quota.

Registration:

All members except American Farmer Degree candidates and the two state delegates must have their registration card filled out before leaving home. Your parent, vo-ag teacher, and high school principal or superintendent must sign the card. Your vo-ag teacher should get the cards from your State FFA Advisor now.

When you arrive in Kansas City, your advisor or chaperon must present the completed registration card of each delegate in his group at the FFA Convention registration desk. There, each member will receive an identification card which both you and your advisor must sign. This card will admit you to the convention and entertainment sessions. Keep the ID card with you at all times.

Above all, get your registration card and have all the signatures on it before you leave home. No registration cards for members will be available in Kansas City.

VO-AG carries over to COLLEGE

By Terrell Benton

WE ARE LIVING in a new era, an era when agriculture and farming are undergoing a revolution in organizing structure, technology, and methods. The need for trained young men in agriculture is greater today than ever before, despite a decreasing farm population.

When the Russians put Sputnik I into orbit, it caused a scare among the American people. Almost immediately, laymen and educators began to blame our schools for allowing the Soviets to move ahead in the race with us to conquer outer-space. Plans were made to add more science and mathematics to the high school curriculum at the expense of other courses. In this haste to make *scientists* of our young people, courses which were fundamental to our nation's welfare may have been temporarily damaged. Perhaps one such course was vocational agriculture.

In some instances, students have been advised to omit vocational agriculture as a part of their curriculum and concentrate primarily on a college preparatory program of study.

The question is simply this: Should high school boys who plan to enroll in a college of agriculture after graduation from high school take vocational agriculture in high school?

In a study compiled by a prominent educator at the University of Illinois, he attempts to answer this question.

A. H. Krebs said, "The conquest of outer space will mean little if, because of the effort to achieve it, we so neglect other aspects of education and human endeavor that we lose sight of the human values so important to our way of life."

In an article, "Does Vo-Ag Prepare for College," E. V. Walton, head teacher trainer in agricultural education at Texas A&M says, "We find men who normally pride themselves on scientific thinking arbitrarily jumping into the conclusion that vocational education credits are far inferior to the disciplines involved in math and science as preparation for college."

"Research in vocational education does not support this conclusion. The great body of evidence in the United States concerning the quality of college performance on the part of vocational credit students as compared to non-vocational credit students is repetitious with such phrases as, 'no significant differences;' 'superior in agriculture,' 'equal in other fields;' 'vocational agriculture curriculum is as satisfactory as other curricula for college preparation;' 'no significant differences;' 'former students of vocational agriculture excelled by one-third of a mark.' "

He goes on to say, "Vocational education training does not penalize and on the other hand may constitute superior preparation for college."

Another educator, Lee Cronbach said in part, "Education depends upon what the pupil does, not on the names of his courses. . . ."

The director of agricultural education in Maine recently conducted a study, "Does Vocational Agriculture in High School Serve as Adequate Preparation for Entrance to the College of Agriculture?"

There were 22 research studies dealing with this question to some degree included in this report. Despite all the limitations of different places, different conditions, and a considerable length of time, in general, it said, "Students who have vocational agriculture in high school are at least as successful in pursuing a college course in agriculture as those with other high school courses."

The opportunity of self development provided through active membership in the Future Farmers of America will indeed be valuable to the high school student preparing for college. Thus the former FFA member will be able to excel in the extra-curricula activities in college, and to become active in leadership roles.

Emphasis must be placed on the growing need for vocational training at the high school level for preparing students of the college of agriculture. This is true because the current trends in the curricula fail to provide the student with practical experience and skilled training which is essential to employment in the field of agriculture.

All high school boys do not need vocational agriculture; on the other hand, neither should students be denied the opportunity to enroll in vocational agriculture if *genuinely interested.*

It must be remembered that agriculture is the most fundamental and basic of all occupations. It is essential for our national welfare and economy, and without a strong and prosperous agriculture we will not be able to continue our present position in world leadership.

Author Terrell Benton was a National Officer of the FFA in 1955-56. He was graduated from the University of Georgia in May with a B.S. Degree in Agricultural Education.

EVERYONE in the ACT at Moultrie, Ga.

Candidate for office is interviewed by the division and chapter officers.

One of the largest FFA Chapters designs a leadership training program to benefit the individual chapter member.

By J. O. Paine

THE young man stood on a raised platform along one side of the school gymnasium and began the FFA opening ceremony.

He stood erect and looked calmly at the audience of around 450 people gathered for the largest father-son banquet in the state and spoke as though he were talking to a friend on the farm.

This young man, the president of the Moultrie, Georgia, FFA Chapter, had begun his leadership training when he entered vocational agriculture training and the FFA. When he was promoted to the senior division of his Chapter there began an intensive program of training.

His case was not unusual. Except for the fact he was elected president by the Chapter members, he got the same training every one of the 220 members receive.

Moultrie FFA advisors and vo-ag instructors work as a team. Left to right, Bill Yearta, Dan Sadler, Cohen Webb, Homer Patterson, and E. B. West.

Cohen Webb, coordinator of the vo-ag program at Moultrie, says, "We take more pride in leadership training than anything else. To see a boy enter vocational agriculture young and inexperienced, then observe him as a senior making a talk before the whole Chapter as though no one were in front of him shows us we are accomplishing something."

The Moultrie Chapter, with 220 members in school and 52 Young Farmers, is one of the largest Future Farmers of America groups in the world. Located in Georgia's richest agricultural county, the Chapter has a unique program of leadership training administered by Webb and instructors Bill Yearta, E. B. West, Dan Sadler, and Homer Patterson. The program is designed to benefit every chapter member.

The Chapter is divided into a junior division and a senior division. Each division is divided into six units, each of which meets once a month.

Since every individual unit has its own officers, 72 boys are trained as officers of the units. Each division has six officers and the Chapter elects eight officers, making a total of 92 who serve in positions of leadership during the school year. No member can serve as officer in more than one group.

Chapter officers at Moultrie are chosen carefully. A member who wants to run for a chapter office is given a list of 29 questions that measure his ability to fill the job. In answering the question, he reveals his average grade in school. He must name state and national FFA presidents, district and state vo-ag supervisors. The candidate must write the paragraph of the creed that applies to his office and answer such questions as, "Will your father let you stay after school to work with FFA?"

Chapter and division officers interview every candidate and disqualify those who do not meet the requirements. Those who pass the personal interview and questionnaire appear before the entire Chapter to make their campaign speeches. Part of the speech consists of going through the opening and closing ceremonies.

On the following day, members elect officers by secret ballot. The winners take office the following school year.

In a chapter as large as Moultrie's, the basic work is done in the unit. At the first of the school year, every unit goes over its program and sets goals for the next nine months. The unit president discusses the program with the division and chapter officers, and the officers decide whether the goals are high enough. If they are not—or if the goals are too high—the program goes back to the unit for revision.

During his first year of vocational agriculture, a Moultrie student has one productive enterprise, such as cotton, corn, peanuts, or tobacco, and one improvement project. Among the improvement projects are terracing farm land, painting the home, or installing running water at home.

The following year a student must have two productive enterprises and two improvement projects. The number of both increases one a year, until in his junior and senior year of high school he has four of each.

The Future Farmers take their projects seriously. A member of the Chapter, Roscoe Gay, entered two acres of tobacco as his productive enterprise in 1959. He made the second best tobacco yield in the entire county, selling an average of $1,600 worth of tobacco to the acre.

Roscoe was recognized at the Chapter's father-son banquet, along with seven other members who had done exceptional work during the year on various programs. Each project was sponsored by a local merchant who awarded the first place winner a trip to the National Convention in Kansas City. Last year, 11 Future Farmers and an advisor made the 1,000 mile trip.

Moultrie Future Farmers have won

(Continued on page 47)

Snout Beetle

Nature's Wrecking Crew

By
John R. Clawson

OF ALL THE families in nature's animal circus, none are so spectacular and so varied as the beetles. These hard-shelled insects form the largest order known. Between 250,000 and 350,000 different kinds of beetles have already been named. Still others remain to be identified.

They are the "strong men" of the show. In proportion to their size, beetles are the strongest creatures on earth. If you were as strong as a beetle, according to your size and weight, you could lift a whole freight train on your back and carry it up a mountainside. Champion weight-lifting athletes could walk away with the Empire State Building. On a smaller scale, beetles perform equal tasks every working day.

Not only the most numerous and strongest, beetle families include some of the most beautiful of insects, some of the most helpful friends of man, and some of his most costly enemies.

Beetles also act as sort of a super-wrecking crew. Some destroy pest foes; some clean up dirt and debris; some bury dead birds and mice; some strip dead trees; some hold down the number of weeds. But, as in any group, there are destructive members as well. These attack valuable crops or manufactured products. Their dollar damage runs into billions. But—good or bad—beetles are interesting to study.

Just a little imagination at the mention of some of their names will show what exciting lives many of them lead.

There are the bombardier beetles—who release clouds of poison gas into the faces of their enemies, accompanied by explosive shots like small firecrackers popping. There are the predaceous diving beetles—whose young are so bloodthirsty for insect larva, minnows, tadpoles, and fish that they are called "water tigers." There are soldier beetles, rove beetles, blister beetles, hister beetles, darkling beetles, and click beetles. The "fiery searcher" roams throughout the night in search of harmful insect pests. The ambrosia beetles have homes with well-ordered, well-behaved family life—almost as people do.

Sometimes beetles are given names showing their resemblance to certain animals. Among these are stag beetles, antelope beetles, rhinoceros beetles, tiger beetles, and tortoise beetles.

Then there are the sacred scarab beetles, sexton beetles, engraver beetles, powder post beetles, long-horned beetles, carrion beetles, carpet beetles, drugstore beetles, and snout beetles. Included in the order also are the lady bugs, fireflies or "lightnin' bugs," June bugs, bessybugs, and the dreaded cotton-boll weevil. Sometimes their nicknames are best known—like whirlygigs or tumblebugs. Of course, some of these names belong to whole families, and others to individual species.

From Man's viewpoint, some of the beetles are very costly in dollars and cents. Destroying trees, boring into furniture, floors and beams, their sawdust trail costs man more than 20 million dollars a year.

The destructive ability of the potato beetle, the cucumber beetle, and the carpet beetle are well known. June bug larvae sometimes destroy whole strawberry beds, and often eat the roots of lawn grass until the lawns can be rolled up like carpets. One of the bostrichid beetles is popularly known as the "short-circuit beetle," because of the way it eats into telephone lines and electric cables.

Some of the worst pests of all are found among the snout beetles. They include the sweet potato weevil, the strawberry weevil, the cotton boll weevil, and the rice weevil. The snout beetles are the ones that slice the half-moon hooks you find in cherries or plums, and they put the worms in wormy apples.

All in all, their dollar damage is too vast to calculate, but is somewhere in the billions.

With so much damage being done, it might seem that beetles should be listed entirely as pests. But this is not so. Nature, in the end, is impartial. She has a vast plan in which all creatures are partly necessary, and partly destructive, to each other.

There are good snout beetles as well as bad. While the work done by other species is even more beneficial, some of the weed-destroying snouts are quite valuable. There are over 20,000 different kinds of snout beetles—1,800 in America. Each beetle has a favorite host plant it prefers to work on. While man justly complains that the cotton boll weevil is destroying cotton plants, he does not complain when another snout beetle destroys ragweed.

The most valuable of all beetles are perhaps the lady beetles. They eat aphids, scales, and other plant consuming pests. In their way, they more than make up for the dollar damage done by their cousins.

The cottony-cushion scale is held in check by a lady beetle imported to America from Australia. A lady beetle, recently imported from India to control cotton aphids, eats a vast number of these pests. A careful count was kept on the number of aphids eaten by one of these helpful beetles. She ate 16,321 aphids in one week. Still another species was introduced from Guatemala. She controls the plant mites that destroy citrus groves.

For centuries lady beetles have been respected and protected for the valuable work they do in freeing farm crops

from harmful pests. Sometimes they are collected and sold by the basketful.

Almost as important as the lady beetles are the ground beetles. They, too, attack a large variety of insect pests, snails, earthworms and even small animals. Some of these very large beetles were imported from Europe to fight the destructive gypsy-moth and the brown-tail moth. Adults will climb trees in search of caterpillars. They do much of their hunting at night (some have no eyes) and they also track down cutworms and army worms that destroy many crops.

Many beetles perform other acts that help mankind. Few people realize how much dirt, debris, dead animals, dead plants, etc., there are on earth. One job given the beetle wrecking crew is to help clean up the scraps.

Perhaps you have seen a dead bird, mouse or rat lying on the ground in the afternoon. The next morning when you looked, perhaps the animal was

Lady Bird or Lady Bug

gone. Often, the animal has been buried by sexton beetles.

Two of these small beetles, working as a team, will dig the earth from beneath a bird and then cover it over in a single night. Although the bird may outweigh the beetle several hundred times, two sextons may lift the bird and carry it to a "burying ground." Because they work only in darkness, few people have a chance to see how much work the sextons do.

Sacred scarab beetles were thought to be good luck in Biblical days in Egypt and Rome. Soldiers wore rings with the beetle image carved on them. In many Egyptian tombs these beetles were placed with the dead.

So beetles are quite varied in their habits and their history.

One curious little fellow is called the golden tortoise beetle. Normally it is a dull, reddish-brown color. But when happy and feeding well, it glows like glittering gold. When it is frightened, or when it dies, it turns back to a very drab color. It is one of the few creatures capable of expressing happy emotions in color.

Some beetles are good. Some are bad. But regardless of which side of the fence they are on—when they go to work, they make a shambles of their target. They form a mass of tiny workmen—a wrecking crew in nature.

Chapter Advisor Roy Butler with most of the members who baled the hay.

CUSTOM HAY BALING FOR PROFIT

This activity made money for the chapter while performing a service for ranchers in the area.

By Roy Butler

DOES YOUR chapter have a good summer fund-raising project? If not, you might take a tip from Future Farmers at Duck Valley, Nevada.

In a three-month custom hay-baling operation last summer, the Chapter averaged over $50 per day. That was enough to buy a $2,385 hay baler and clear over $360 besides.

Here's how the 32 Nevada Future Farmers did it:

First, the Duck Valley Chapter is located on a remote Indian reservation, 97 miles from the nearest city. Livestock and hay production are the reservation's main agricultural interests.

When Chapter officers suggested a commercial hay baling operation, Advisor Roy Butler took them to the nearest bank—200 miles roundtrip. It was a good risk—the bank loaned them about $1,288. State Advisor John Bunten gave the project a vote of confidence to Duck Valley School Administrator Kenneth Crawford. So the school put up $1,097 and the project was underway.

They bought a hay baler and started to work on June 11 baling surplus stacked hay. By mid-July, native grasses were ready for baling. Crews of five were on double shifts from daylight to dark, earning approximately $1.50 per hour per man. Chapter officers signed a contract with the local livestock association to cut, rake, bale, and stack 200 acres of native hay.

By then it was big business. The Chapter's government surplus tractor and mower had too much to do. So the Chapter rented another tractor and mower to keep up with the work. An 8 x 16-foot trailer, built in the vo-ag shop, was used to haul the bales.

These chapter officers shown with advisor signed the baler mortgage.

Before the 200 acres were baled, enough orders were in to fill the rest of the summer.

At the end of the summer, records showed over 480 tons of hay had been baled. Gross income was $4,586.90 and total expenses, including the hay baler loan, were $4,222.56. This left over $364 clear profit. With the loan paid off and a clear title to their machinery, the Chapter expects greater profits this summer.

All the benefits received cannot be measured in dollars and cents. The Chapter members are now familiar with this modern method of harvesting hay and three members now know firsthand how a bank loan is acquired. The Future Farmers also received valuable farm mechanics experience under actual field conditions. Also, the project opened a market for local ranchers' surplus hay production.

If hay production is an enterprise in your area, your chapter may want to carry out a similar project. As the Duck Valley Chapter found out, the work isn't easy but the profits are big.

New Holland Photo

Are You Getting the Most from YOUR GRASSLAND?

By
Horace McQueen

DO YOU FIT grassland farming into your operation? On many farms, it provides a major source of income and could increase your profits. But whether your grass is used for livestock production, conservation, or a cash crop, good management will bring greater returns.

Growing *good* grass is no simple task. For success in grassland farming, the same basic principles and practices that are used with your other crops and livestock must be applied.

USDA-SCS Photo

For Feed

Our grasslands provide the major raw materials in the form of hay, pasture, or silage for the production of meat and dairy products, wool, and mohair. Dairy cattle may obtain 70 percent or more of their nutrient requirements from forage; beef cattle, 75 to 80 percent; and sheep, 90 percent. Even higher proportions of feed nutrients may be secured from forage if desired.

Good forage crops have a high productive capacity. On good corn land, they can produce as much total digestible nutrients as is found in 100 bushels of corn. On poorer soils, forages will outyield corn and other grain crops. Whatever your location, you have a wide selection of forage crops to choose from.

For Conservation

You must include adequate amounts of grasses and legumes in crop rotation systems to maintain the organic matter content in the soil. Grass is also effective in holding water runoff and soil erosion to very low losses.

For example, in Missouri research has shown that on land where corn alone is grown it would take only 56 years to lose seven inches of topsoil. When a corn, wheat, clover rotation is used, it would take 437 years. Where grass alone is used, without any cultivation, it would take *3,500* years to lose seven inches of topsoil—showing the value of grass as an erosion control.

Wise land use is an *important* part of grassland farming. Under this system, the land is put to the use to which it is best suited and which will—over a period of time—prove the most profitable for you. The most productive and least apt to erode land is used for row and grain crops and rotated with grasses and legumes. Rolling land is kept in grasses and legumes as long as possible between cultivated crops. Steep hillsides are kept in grass all the time—maintaining high forage yields by reseeding, fertilization, etc., at regular intervals. The steepest slopes are fenced, cattle kept out, and the trees maintained permanently—thereby decreasing erosion and providing a good watershed.

For a Cash Crop

Many farmers who practice grassland farming sell seed. In most cases, the sale of seed from a good stand of certain grasses provides a good source of additional income. In some areas, there is a good market for hay.

In grassland farming, you are shooting for large yields of high quality forage. To accomplish this, plant food must be supplied in *abundance*, according to the requirements of the grass you use and the ability of your particular soil to supply the nutrients. For example: In New Jersey, when 25 pounds of nitrogen per acre were applied, timothy hay yielded 3,400 pounds per acre. Untreated timothy on nearby land yielded only 1,780 pounds.

It has been proven that $1 invested in fertilizer will usually bring a return of $5 to $9, depending on the pasture crop on which it is used. Therefore, fertilizing pastures is an *investment*—not just an expense item.

Careful management of your livestock is another way to make grassland farming yield better profits. Culling low producers while upgrading your herd, disease and insect control, plenty of fresh water, good shade, easy access to salt, and gentle treatment increase your returns.

Grassland farming is not a simple, easy type of farming. It takes more skill and knowledge than most other types of farming. To be successful in grassland farming, you must manage both your livestock and forage crops with equal skill.

Before entering into a grassland farming program, plan your operation. Grassland farming is made up of many "links," and they must all be strong if your program is to succeed. As with many other farm enterprises, it is better to grow into grassland farming.

How to run and steal bases

by
Raymond Schuessler

Right-handers swing away from first base. Push off with left foot and throw body in first base direction.

Start your arc before coming to bag. Hit inside corner with whichever foot is most convenient as you go by.

For straight in slide, bend take-off leg under and raise other leg off ground, bending it toward the bag. Throw upper part of body backward.

"YOU STEAL bases off a pitcher," says Ty Cobb, "not off the catcher. You can always beat a good peg by the catcher with a good slide. But if you don't get that jump on the pitcher, you're a dead duck."

Cobb should know. He was baseball's greatest base stealer, whose records will probably never be broken. He was practically the inventor of the slide and made such a technique out of base running and sliding that merely to have Cobb on the bases was a frightening thought to the opposition.

"You've got to study each pitcher individually," says Cobb, "to learn his habits. Does he have a good 'move' towards first? Does he make only one throw to first? Does he kick too high or take a slow backswing before throwing to the batter? You can learn all this in the early innings."

It has been truly said that the best base runners are not always the fastest, but the smartest.

Here are the basic techniques. When on base, stand with the left foot touching the inside edge of the base and keep it there until the pitcher assumes his pitching position.

How big a lead should you take? That depends on how fast you can get back to first base. Cobb used to take one of the biggest leads in baseball—about 20 feet. But he had the speed and the slide to get back when he had to. One thing is certain: don't take as long a lead off a left-handed pitcher as you would a right-hander.

As the pitcher prepares to throw, take your lead. Stand bent over with your body in good balance, ready to move quickly in either direction. Keep your arms loose.

Never take your eyes off the pitcher. Keep an eye on every part of his body to determine the exact instant he lets the ball go.

When you go, push off with your right foot and take your first step with your left foot. *Never* look back to see if the ball is being thrown. Keep your eye on the baseman covering the bag, and by his actions, judge where you must slide.

To be a good base stealer or even base runner, you have to know how to slide. There is nothing difficult about sliding once you learn how. If you don't learn the proper technique you are leaving yourself open for injury.

There are three basic slides which a ballplayer should know. They are the straight-in slide, the get-up slide, and the hook slide.

As you approach the bag, keep your eyes on the bag. Take off for the slide from whichever foot is most natural for you.

Whichever slide you use, be sure the foot of your bent leg is turned *sideways* to avoid catching the spikes in the ground.

Above all, once you decide to slide, SLIDE. Never change your mind. This is how accidents happen.

After you learn the basic techniques, learn to watch the fielder's feet so you can decide which side to "hook" in. You might also learn such shifty habits as holding one foot for the fielder to tag, then suddenly withdrawing it and tagging the bag with the other foot.

The head-first slide is sometimes used in diving back to first base when the pitcher turns to catch you off base. But it is best not to use this slide on other occasions, especially, at the plate, since the catcher can easily kneel and block you off.

Remember you have to drive and dive and batter your way around the bases. Nobody should prevent you from scoring that extra run that may mean victory.

Before you can run any bases, however, you must get on base. Here too, you must learn a base running technique right from the plate. You must learn to get away from the plate the *instant* you hit the ball. That split second half-step can help you beat the throw.

The left-handed batter has a half step advantage in that he is closer to first base and is leaning in that direction when he hits.

If the ball is hit to the right side you can easily see where the ball is while running. But if you have hit to the left side, glance quickly without losing speed, to see what's happening to the ball. If it is caught and the play looks close, keep running in a straight line.

If the ball has gone through for a hit, swing out to the right in a small arc that will cut the inside corner of first base and continue on towards second base. All bases should be run in this manner.

These are the fundamentals of base running and base stealing. Work on them during practice sessions and you can become more valuable to your team.

Dynamometer tests show power and gas because of

In test after test, farmers were surprised to learn they were wasting power and gas! The reason? Borderline spark plugs with unnoticeable or slight misfiring! These tests show how power and economy improved after borderline plugs were replaced with new Champions . . .

HORSEPOWER UP 24.2%
GAS ECONOMY UP 36.3%

At Owosso, Michigan, farmer Tony Kalisek (kneeling, r.) said, "I plow mostly hard clay, and these savings will really mount up over a season." At Owosso, 8 of 12 farm tractors tested were wasting power and gas—because of borderline spark plugs.

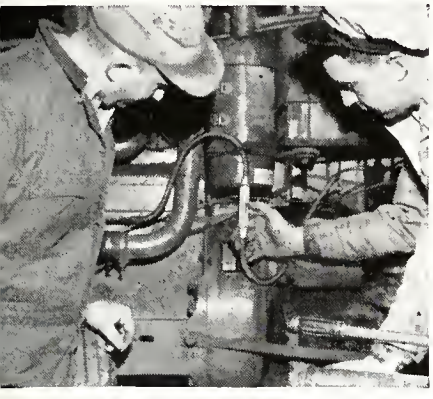
HORSEPOWER UP 13.3%
GAS ECONOMY UP 14.4%

At San Antonio, Texas, farmer Alvin Santleben (r.) said. "The test proved to me that I'm money ahead in the long run to replace plugs before they waste my power and gas." At San Antonio, 45 of 49 farm tractors tested at random had borderline spark plugs.

EVERY MAJOR U.S. TRACTOR MAKER

AFTER STATE—

most farmers are wasting borderline spark plugs!



HORSEPOWER UP 11.1%
GAS ECONOMY UP 13.7%

At Morocco, Indiana, farmer Lambert Halsma (l.) said, "These tests showed I was wasting power and gas by changing plugs just once a year." Tests at Morocco showed that *every* tractor with over 250 hours on its plugs was wasting power and gas.

HORSEPOWER UP 9%
GAS ECONOMY UP 13%

At Lyndon, Illinois, farmer Victor Nelson (r.) said, "I didn't realize how much power and gas I was wasting by running plugs more than 250 hours." At Lyndon, 19 of 20 farm tractors tested had borderline spark plugs that were wasting power and gas.

HORSEPOWER UP 21.7%
GAS ECONOMY UP 17.5%

At Owosso, Michigan, farmer Leslie Long (r.) said, "The test sure proved to me the importance of replacing plugs every 250 hours." Tractors tested at Owosso averaged 10.4% more hp and 11.9% better economy after borderline plugs were replaced with new Champions.

HORSEPOWER UP 6.5%
GAS ECONOMY UP 9.4%

At San Antonio, Texas, farmer John Myers (l.) said, "The test showed me that you gradually lose your power and economy as plugs wear out." At San Antonio, tractors averaged 8.9% more hp and 7.2% better economy after new Champions replaced borderline plugs.

These tests show that most farmers are wasting costly amounts of power and gas—because they don't replace spark plugs often enough.

Don't let borderline plugs waste *your* power and gas. Keep your engines at full power and economy. Install new Champion spark plugs *regularly*—every 250 hours in tractors, every 10,000 miles in cars and trucks.

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Spark Plugs

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SOLD!

Exclusive Club boosts interest in Junior Livestock Auction

by Francis Altman

DO YOU have a junior auction sale at your fairs and stock shows? If so, how do you show your appreciation to the buyers of junior livestock?

Junior exhibitors at the Tulsa State Fair in Oklahoma have an unusual "thank you" award for buyers at their junior auction sale. This award is membership in an exclusive club, quite appropriately named the Hoof and Horn Club.

Club membership is restricted to buyers, whether individuals or organizations, who purchase an animal or animals at the Fair's junior auction. It's good for one year.

At first, the idea was looked upon a bit skeptically by some. But by the close of the 1959 fair sale, there was little doubt the club was creating more interest in the junior auction. Auction records showed 139 buyers had become eligible for Hoof and Horn membership and purchase prices for the top 100 steers, 20 barrows, and 20 lambs had soared to a premium total of over $54,000.

The mechanics of Hoof and Horn Club are quite simple and could be easily adopted anywhere. The membership card is wallet-size. It is imprinted with the name of the club, the buyer's name, and year. Printed in the background is the head and large spread of horns of a longhorn steer.

On the reverse side is typed the boy's name, his FFA chapter, address, and instructor. The cards are distributed to vocational agriculture instructors and county agents, who in turn pass them out to the respective exhibitors. The FFA member is now placed in the position of sponsor. He may present the membership card in person to the buyer of his animal or mail it. In most cases, the card has been mailed with a brief letter. Many of the exhibitors choose to outline their plans for the money they have received, such as for college or expanding their farming program.

Glen Kunneman showing one of the top lambs at the Fair to Mrs. Dan Holmes who bought it at the auction sale.

Elgin FFA member Mike Lodes exhibits his Grand Champion Steer at the 1958 Fair and is surrounded by buyers.

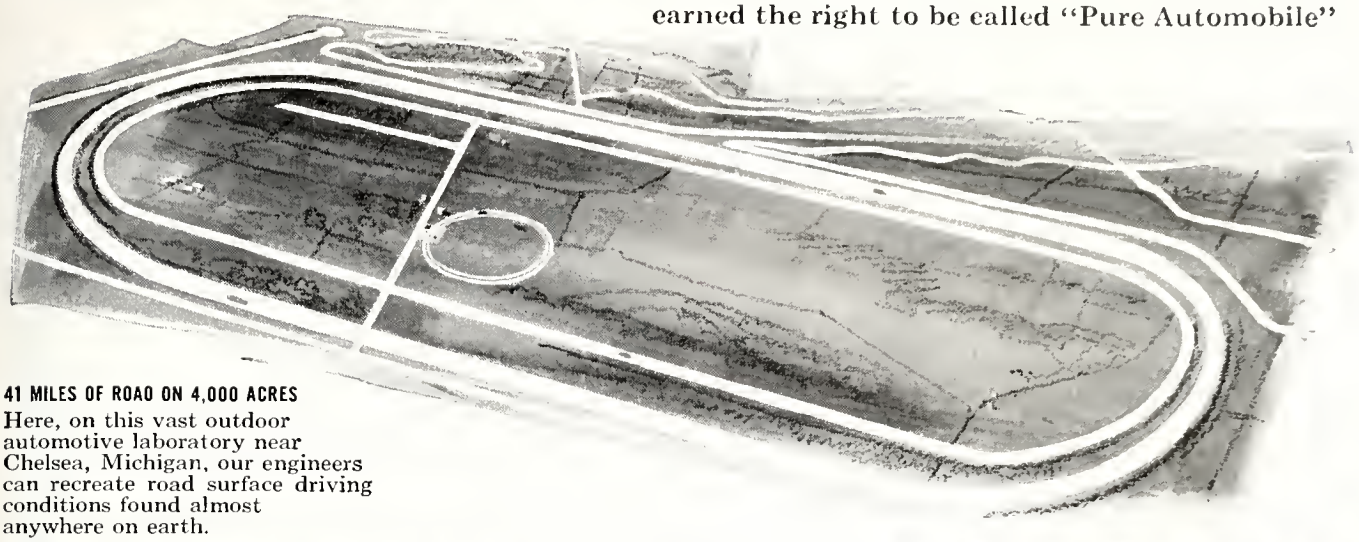
These letters are being received with heartening interest and appreciation—as shown by the fact that from 75 to 80 per cent of the buyers proudly carry their Hoof and Horn membership card and display it freely. In fact, a new scheme had to be devised shortly after the 1959 auction when it was discovered that 107 of the 139 purchasers were repeat buyers from the 1958 auction. To designate these two-year charter members, gold stars were placed in the lower right-hand corner of their second membership card.

In the meantime, the Youth Activities Committee of the Tulsa Chamber of Commerce, which started the project, is wondering how to designate their triple-year Hoof and Horn members. They are confident there will be a goodly number, come the 1960 auction.

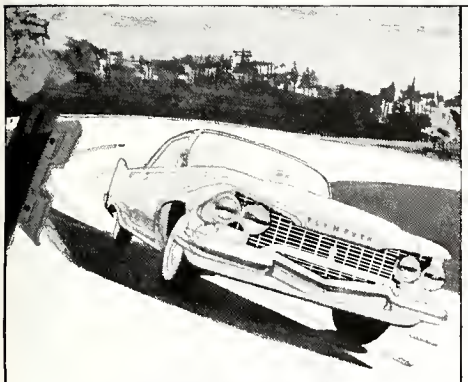
Photos by Earl Schweikhard, Oklahoma FFA Exec. Secretary

Around the world in 41 miles

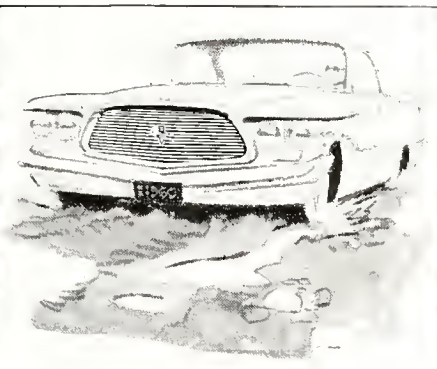
The story of the Chrysler Engineering Proving Grounds—where our cars earned the right to be called "Pure Automobile"



41 MILES OF ROAD ON 4,000 ACRES
Here, on this vast outdoor automotive laboratory near Chelsea, Michigan, our engineers can recreate road surface driving conditions found almost anywhere on earth.



4.7-MILE HIGH-SPEED OVAL
Probably the most precisely engineered track of its kind. On it, test drivers helped prove the 1960 cars could withstand four times more punishment than previous models.



THE WORLD'S WORST PLACE TO DRIVE
That's the teeth-jarring Endurance Road, where we tested cars around the clock. Proved: new Unibody has twice the torsional strength, 40% more beam strength than earlier models.

TWIN OF STEEPEST PAVED PUBLIC ROAD
This towering hill duplicates the 32% grade in San Francisco's Arguella Boulevard. Severe hill-climbing tests helped develop our powerful new Economy Slant 6-cylinder engine.

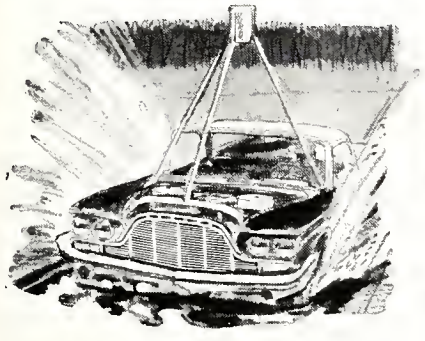


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photo roundup

This little pig is going to Haiti. Ohio Future Farmers financed 123 sent to upgrade livestock. From left, State Officers, Advisor Weiler, and Executive Secretary Purkey.

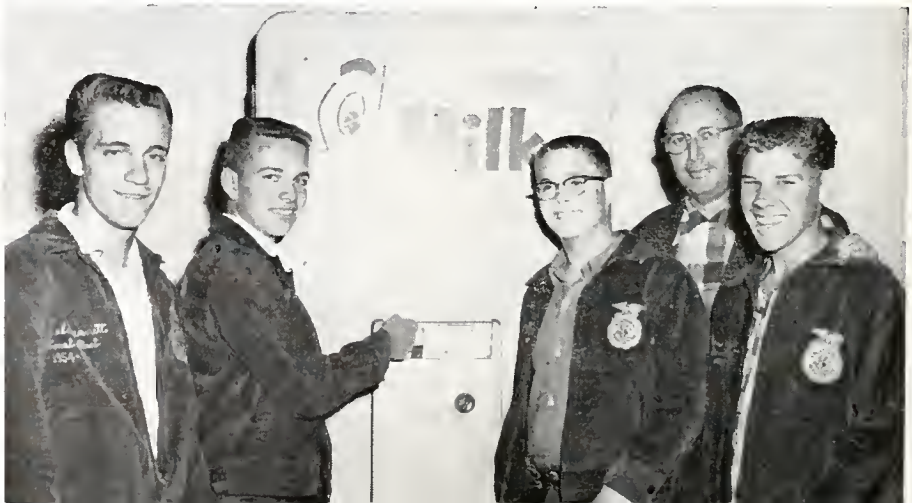
How's this for ribbons, plaques, and trophies? The Pine Valley, Minnesota, FFA Chapter has a room full. Mr. A. A. Hobery, advisor, and his chapter officers are all smiles.

What about an FFA Skilled Driving Contest? Ohio's winner, Clinton Mutter, displays his award. Lt. Smith, left, Highway Patrol, helped start contest; at right is Cpl. Kinsey.

Walter Baysinger, right, receives watch from J. E. Hill, Illinois director of vocational education. Baysinger has 40 years service as vo-ag instructor.

Santa Rosa, California float features FFA activities. Lamb represents FFA projects; farm account book, records; diploma, educational program of FFA.

This milk vender operated by Dos Palos, California, Chapter earns money for Chapter and promotes milk. With Chapter Officers is Kenneth Easter, advisor.



Here's how one smart farmer bought 250 man-hours at less than 8¢ an hour

With 2400 acres in wheat, barley, alfalfa, sugar beets, tomatoes and dry beans, Arnold Collier has little time to enjoy the placid climate that lengthens the growing season of his Dixon, California farm.

Arnold has 4 year-round men to help run his place, with extra man power during seasonal peaks.

Day-to-day farm work centers around a machine shed-shop where equipment is housed and maintained. Between Arnold and his men the extension telephone in this building gets a lot of handling. It's used to order seed, fertilizer, parts, dispatch trucks, contact buyers—keep the operation rolling.

Arnold figures his extension saves him and his men several hours a day in the busiest months, and at least one hour a day in the off-season.

That's well over 250 man-hours a year. And Arnold's extension only has to save about 20 of those hours to pay its way. That's profitable in any farmer's language.

Why not have a look around your place and see how much time you can save with an extension. It's a bet you can't afford to miss. Just call your telephone business office. They'll be glad to help.

BELL TELEPHONE SYSTEM

Farming in the 21st Century

by John L. Russell, Jr.

Photo Courtesy of Ford Motor Company

WHAT WILL FARMS be like 50 years from now? How will the average farmer live? Will there even *be* farms?

Dr. James Bonner, professor of biology, California Institute of Technology answers *yes* to the last question. He says people will still be eating food and plenty of it. They won't be taking their daily supply of energy directly as electrical current nor will they be satisfied with a pink pill.

But of course farming will change radically by the year 2000. The silo, farm house, and the old red barn will be replaced with sleek, modern, streamlined, air-conditioned structures filled with electronic equipment.

Growth regulators will control the rate and type of animal and vegetable produced. Chemistry will make possible producing three-pound broilers in eight weeks instead of eleven and 2,000 pounds of beef will be produced in the same length of time it now takes to make 500.

Frozen sperm irradiated in nuclear reactors will furnish mutation offsprings stronger and better for bigger market prices. Farmyard manure will still be used but will be supplemented with sewage sludge and waste products. Weeding crops and worrying about diseases or insects will be a thing of the past, and even the weather will be controlled by satellites.

Computer and photo-electric sensing devices and programming on magnetic tapes will allow farmers to plow, sow, cultivate, and reap several fields of crops at the same time. By simply monitoring at the console of a television receiver, robots will do most of the labor.

All timber will be cut electrically to any shape desired by a form of electric charge—thus cutting out the double processes of sawing and planing. Electricity will be furnished by collector plates that will soak up the sun's heat to provide energy for your own little electric power plant which will operate the many electrical appliances around the farm.

The farmer clothes will be very different 50 years from now. There will be no weaving or knitting. Fabrics will be poured in liquid form from giant pastry tubes or rolled into large sheets and cut in tremendous quantities. But *you* will be growing the very products from which these new materials are made.

From the central electronic center in your home or office, you will be able to see on your closed circuit TV all that goes on anywhere on the farm without leaving your easy chair. If you want to give orders, you will simply use your intercommunication system or your pocket telephone.

You won't be shipping your goods long distances any more. With the coming of automation there will be no need for people to congregate in big cities. Farmers will tend to "live in" rather than inhabit the countryside; farms will be near their markets in smaller cities of around 10,000 which will be self-sufficient and independent.

No longer will any farmer have to do without city luxuries. The typical farm house of the year 2000, powered from a small local atomic power plant, can have heating and cooling systems, germicidal lamps, water and sewage systems and many other things.

Charles H. Weaver, vice president in charge of atomic power activities for Westinghouse Electric Corporation, and Francis K. McCune, vice president for atomic business development of General Electric Company, both see the typical home 50 years from now with an automatic control center that will take the labor out of housework and provide a very easy and rich living for all.

With a magic wand the furniture can be dusted. Floors and furniture will be scuff-proof and indestructible. You will have wall-sized TV in color and 3-D. Your electronic oven will prepare food in seconds. Dishes will be washed in a soapless, super-sound wave cleaning chamber and automatically put away.

John L. Burns, president of the Radio Corporation of America, foresees the miracle home of tomorrow being run by a pushbutton household electronic center. This center will get you up with the chickens—if you still want to—close the windows, start the coffee going, cook the bacon and eggs, and what all else.

Frederick R. Kappel, president of American Telephone and Telegraph Company, predicts you may be able to make cheap phone calls anywhere in the world when satellites begin to take over relays.

Going to town to shop will be unnecessary. The wife will just dial a department store on her TV and a salesperson will hold up the various articles. You can buy your farm equipment the same way too. After making your decision, just press your charge plate into a machine. An electronic eye then goes into action and the price will be telemetered to central billing at the store's main office located 100 miles away. Central billing will automatically mail you a bill at the end of the month.

Spray washing will be used to clean both people and laundry, eliminating expensive plumbing. A pint of water an hour is all that will be required for the average farm house, and this will evaporate into the air. Sewage will be disposed of chemically on the premises or turned into valuable fertilizer.

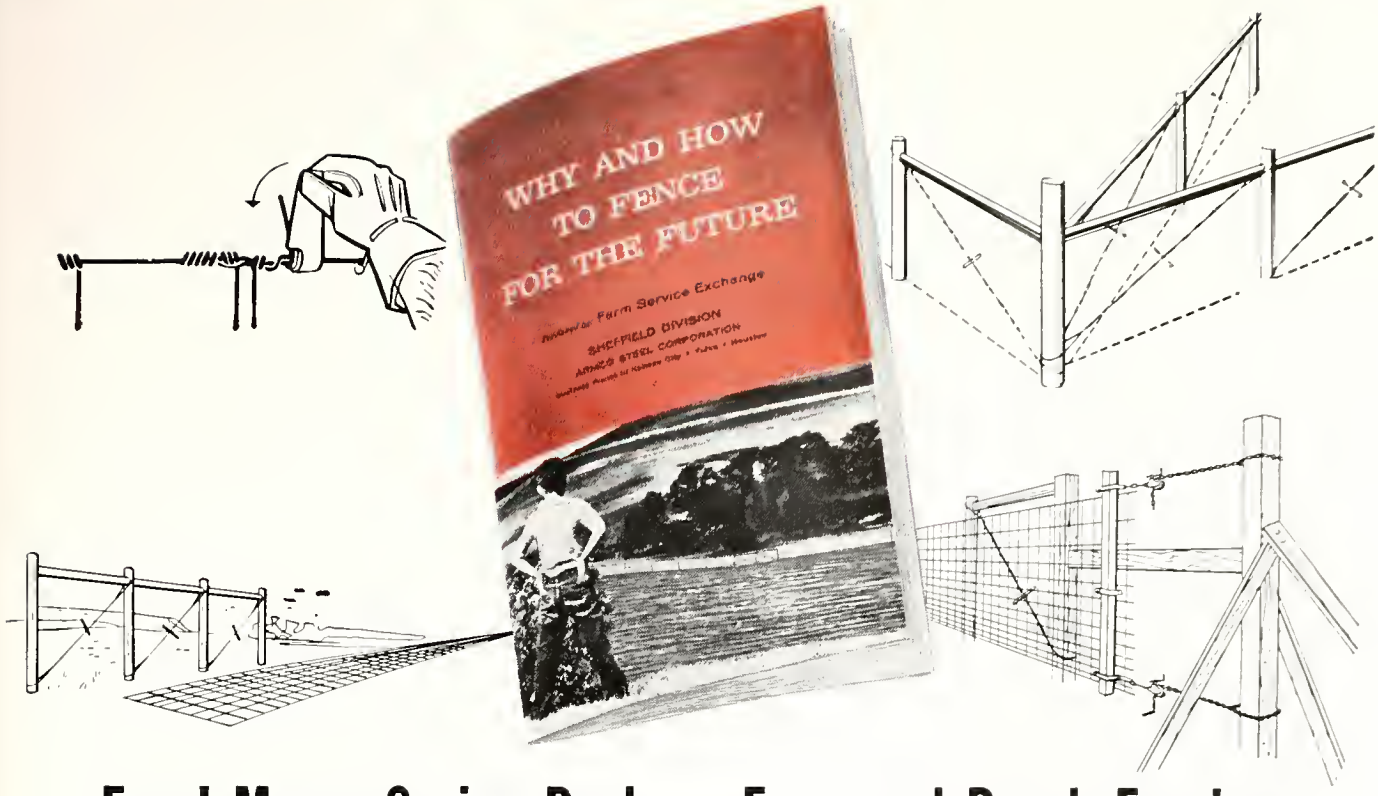
All your vehicles, including farm machinery, will be powered by atomic energy. The vehicles will require little maintenance and will need fuel only once a year—if that often.

With almost totally automatic farms, there will be plenty of time for travel. Supersonic jets and rocket airlines will be popular and cheap to fly by this time, so you can spend the weekends in Europe.

See *you* down on the farm in 2000 A.D.

◆◆◆

John L. Russell, Jr., is author of the book *The Shape of Things to Come*, which was published by the Popular Mechanics Company in June.



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With its greater strength and resistance to corrosion, Sheffield A to Z is built to give you up to 50% longer service—with important savings in maintenance time and money. Let us send you full facts along with our free book on fencing. Mail the coupon today.

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Concession Cues

IS YOUR CHAPTER looking for a good fund-raising idea? If so, some kind of concession operation may be the answer.

A concession operation does not necessarily mean you have to have a booth and sell popcorn, hot dogs, and candy. Vending machines offer good possibilities for many chapters. Vending machines can be purchased or rented; and used for dispensing milk, candy, gum, pencils, and many other items.

Most areas have several good locations for an FFA concession stand. Local and county fairs, school grounds, football and basketball games, and town festivals are only a few of many spots.

Planning ahead is a vital part of operating a concession. How much could you sell per day? What would your profit be on each item? How much expense and labor would you have to put into the operation? It's best to get answers to these questions *before* you start your business.

The problem for your chapter may be in deciding what you will sell. Your part of the country—local tastes and customs—may be a big factor. Also, the time of year and economy of your area will influence the type of operation. What ever your chapter decides to sell, *know* it will sell before opening up.

Vending machines offer good possibilities. (See photo, page 30.) Many schools let organizations within the school run the machines. Some FFA chapters have made a big profit after operating only a short time. One precaution, however, some schools will *not* permit school organizations to operate concessions in the school or on the school grounds. To be safe, talk to your school principal first.

When you have decided to go into the concession business, talk over your planned operation with a concession equipment company representative. Many times they can offer valuable suggestions for the operation which will make it more profitable.

Concession Stands

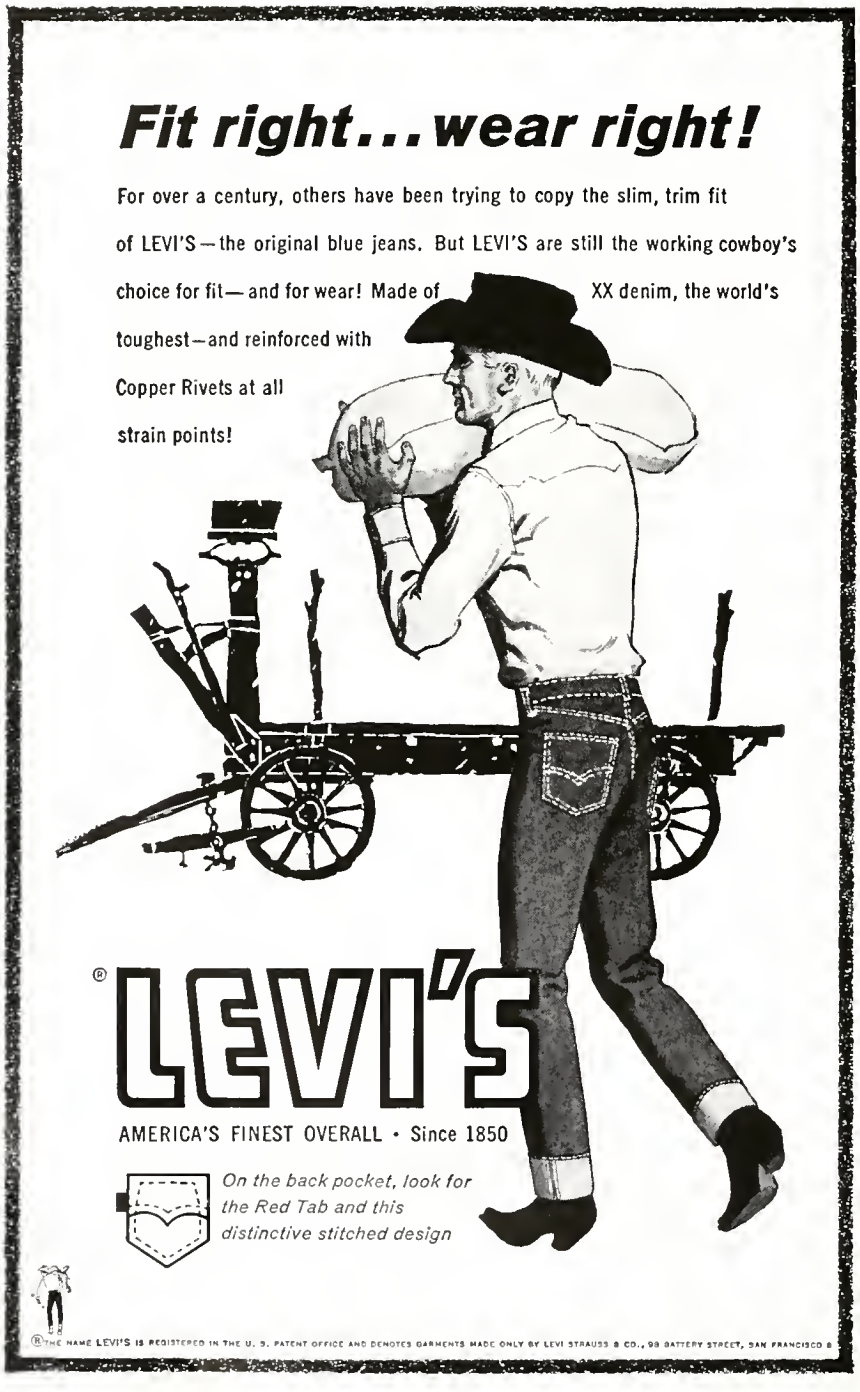
Once you're in operation, make sure all members abide by a few simple rules. First of all, cleanliness is probably the most important thing about a concession stand. It can make or break a sale. Wear clean clothes, have hair combed, and keep the concession stand clean.

Courtesy is another important asset. Try to follow the slogan, "The customer is always right." You know this isn't always true, but it will keep the customers coming back.

Another good idea would be to wear your FFA jackets. Also, a sign, "Operated by the John Doe FFA Chapter," helps.

Vending Machines

When vending machines are used, a little work still needs to be done. Keep the machines clean. Have a trash can close by so customers can deposit candy wrappers, milk cartons, etc. Also, make sure the products you are selling are fresh. Nothing displeases a customer more than to find out the milk is sour or the peanuts have weevils in them.


Fit right...wear right!
For over a century, others have been trying to copy the slim, trim fit of LEVI'S—the original blue jeans. But LEVI'S are still the working cowboy's choice for fit—and for wear! Made of XX denim, the world's toughest—and reinforced with Copper Rivets at all strain points!
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AMERICA'S FINEST OVERALL • Since 1850
On the back pocket, look for the Red Tab and this distinctive stitched design
®THE NAME LEVI'S IS REGISTERED IN THE U. S. PATENT OFFICE AND DENOTES GARMENTS MADE ONLY BY LEVI STRAUSS & CO., 98 BATTERY STREET, SAN FRANCISCO 6

SCIENCE IS REVEALING SOME STARTLING FACTS ABOUT HOW MUCH SWINE WORMS COST YOU...

A 7-10% feed loss is expensive...here's why

Old methods of worm control offered only partial relief. Hygromix, which kills more kinds of worms and gives continuous, day-by-day in-feed control, is furnishing a direct measurement of worm-damage losses... damage which results in 8% slower gains, 5 to 6% loss in feed efficiency.

Everyone has always known that worms are costly to hog raisers. Only recently, measurements have been made which can be directly translated into dollars and cents. Up to the discovery of Hygromix, we have had to rely upon estimates.

For instance, in 1954 the U.S.D.A. estimated that each hog raiser was, on the average, suffering a loss of around $3.00 per pig due to internal parasites.

More recently, the University of Wisconsin made a study of 101 hogs slaughtered by a leading meat-packing plant. All of the hogs were graded by veterinary inspection and classified as "normal, healthy" swine. Yet, when the researchers probed the internal organs of these hogs, they hand-counted *an average* of 463 worms per hog. Damage? It was easily seen. The question was, how much did worms cost the men who fed those hogs?

The unseen drain on profits

Dr. A. C. Todd, Veterinary Parasitologist at the University of Wisconsin, made this educated estimate: Most hogs that might be called normal and healthy experience a 7 to 10% feed loss in nourishing worms of various kinds ... in spite of being treated for worms once, or even twice, with purge-type wormers.

His estimate has since been supported by tests conducted at seven agricultural experiment stations to help track down this hidden drain on hog-raising profits. Their tests were made under different conditions, and for different lengths of time. Hogs which received Hygromix in their feed were compared with hogs fed identical rations without Hygromix.

What worms cost an average hog raiser

A 7 to 10% loss in feed can represent quite a loss to the average hog raiser. Figured on the basis of a 4:1 feed-conversion ratio, it takes 800 lbs. of feed to get a pig to 200 lbs. Using the low figure of a 7% feed loss from worms means a loss of 56 pounds of feed per pig. A man raising just 100 pigs a year could lose 5600 pounds of feed ... almost three tons!

Hygromix feed: continuous protection against the loss

Worms and worm damage lower feed efficiency, slow gains, and depress the general health level of the herd. Hygromix in the feed controls swine worms daily by killing large roundworms, nodular worms, and whipworms as they enter the intestinal tract ... before they can lay new worm eggs to reinfest lots, pens, and pastures.

Thus, day after day, Hygromix feed protects young hogs when hidden worm damage causes the most trouble and the greatest loss. With Hygromix, hogs protect themselves against worms every time they take a bite. Feeds with Hygromix are the only way hog raisers can insure themselves against daily worm damage.

Here is a summary of college results: Where worms were *continuously* controlled with Hygromix there was an 8.1% increase in daily gain during the recommended feeding period, on 5.7% less feed.

HYGROMIX SWINE-FEEDING DATA FOR THE GROWING PERIOD

Station	% Increase Daily Gain	% Decrease Feed Required
Ohio (Drylot)	10.2	6.5
Ohio (Pasture)	6.3	0.7
Nebraska (Drylot)	7.9	7.6
Nebraska (Pasture)	12.0	3.0
Purdue (Drylot)	11.5	5.3
Purdue (Concrete & Soil)	1.0	2.6
Purdue (Concrete)*	3.9	0.3
N. Carolina (Concrete)	−8.9	6.6
N. Carolina (Pasture)	0.0	7.0
S. Dakota	12.6	8.4
Uni. of Alberta*	15.2	6.8
Uni. of Alberta	24.7	12.6
Michigan State	3.7	6.2
AVERAGE	8.1	5.7

*Pigs in these lots were wormed once with purge-type wormer.

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ELANCO

Makers of **STILBOSOL®** (diethylstilbestrol premix)

ELANCO PRODUCTS COMPANY · A DIVISION OF ELI LILLY AND COMPANY · INDIANAPOLIS 6, INDIANA

The Two-Step Windmill

Fiction by Harry Ezell

The twins worked hard gathering all the materials.

WILLIAM SULLIVAN, his shoulders rounded with the weariness of defeat, stood in the kitchen doorway and looked out over his rolling acres. Last spring this view had been a symphony of green. Green, the badge of a farmer's hopes; lustrous green corn marching in rows across the bottomlands, silver green oats rippling in waves beneath the fresh breeze, the thick green hillside pasture, its lespedeza growth thick and succulent, dotted here and there with the rich brown and cream colors of the pure bred dairy herd.

Now, in July, the picture was changed. As they had the summer before, the fresh breezes of springtime had changed in June to the searing breath of summer. Day after day, week after week, hot breezes poured in from the western plains, rolling over the Ozark ridges like a thick, monstrous blotter, soaking up the moisture from the ground. In an incredibly short time the forested ridges had burned brown. The dark rich green of the corn blades had dried to a thin brittleness, rattling like dry bones in the relentless, scorching breeze. Burned out pasture gave scant food for the now lean cattle who stood listlessly in the shade of the scattered trees, or wandered slowly to the one remaining water hole in the once bravely brawling stream.

For the second straight summer the clutching hand of drought had laid its oppressive weight upon the earth, squeezing out the life of the land and the hopes of its inhabitants.

Listlessly he walked across the yard and leaned upon the gate to wait for the coming truck, its arrival foretold by a distant plume of dust along the gravel road. A scorching gust of wind flung the dust ahead of it as it whirled to a stop. Bill and Betty, his sixteen-year-old twins, leaped out simultaneously.

"Here's the paper, dad." Betty handed it to him. "John Brian is selling out."

"Oh, no," he said, and seized the paper. Rapidly turning its pages he came to the advertisement. "For Sale, at my farm, Saturday, July 27." It was all listed, livestock, equipment, the farm itself.

"It sure is too bad," Bill said, crumbling a dried brown leaf between his fingers. "He has lived there ever since I can remember."

"He lived there before you and Betty were born," his father said in a tired voice, "before your mother died."

William Sullivan looked up at his daughter with pride as she served him a second helping of pancakes. Half-orphaned at birth, the twins had grown up under the care of his older sister, who had lived with them until her death last year. Then Betty had taken over the house. Bill did a man's work in the field, and, he noted, a man-sized job with the pancakes, too.

The meal finished, he pushed back his plate, then shoved back his chair. "Kids," he said slowly, "could you

(Continued on page 38)

Ford 2-row mounted picker fits Ford tractors—and other makes as well. Also shown: Ford F-100 pickup truck.

More dollars to the acre—thanks to Ford Power Farming

Busy farmers everywhere these days are finding that better yields and bigger profits seem to come more easily when Ford power equipment is at work on the farm.

No matter what the chore, every member of the Ford Farm Family has a special talent for helping to cut farming costs and time.

Example: national and state contests prove that Ford corn pickers harvest up to eight more bushels of corn per acre—corn that other makes leave in the field!

No doubt about it—you're further ahead when you invest in the Ford Farm Family. And your nearest dealer will be happy to show you how. Take some time to talk it over with him soon.

THE FORD FARM FAMILY • Trucks • Tractors • Implements • Cars • Industrial Engines

Ford MOTOR COMPANY

The American Road
Dearborn, Michigan

(Two-Step Windmill—Continued)

take care of the place by yourselves for a while?"

"John Brian isn't the only one who is in trouble. People are selling out all around. If something isn't done, fast, we will have to sell."

"Oh no, Dad," Betty cried. "Why we couldn't. This is our home."

"I know, baby," he said, "but you know we had to borrow to get through last winter. Now this year's corn is gone. We have no hay for the winter, and the pasture is going, fast. I thought that I would go to the city for a while. There is plenty of work to be found there, and by living with your Aunt Clara most of the money I earn could be sent home. Maybe we could save enough for hay for the stock, and for our own expenses through the winter."

"Gee, Dad," Bill chimed in. "It's tough having drought two years in a row. It will be tough for you in the city, too, when you're used to working out in the fields. But don't you worry about us. We'll take care of the place all right."

The next day William Sullivan threw his suitcase into the back seat and climbed in front with the mail carrier for the ride to town. A rather forlorn Bill and Betty waved goodbye from the gate, then turned back to the house.

"Oh, Bill, what if we lost it?" Betty cried, "What would we do?" The familiar, weathered old buildings seemed suddenly dearer than ever.

"I don't know," Bill said soberly. "Maybe it will rain yet." He scanned the brassy sky without much hope. "If it would just rain soon enough to save the alfalfa on the other side of the creek, we might have hay and pasture enough to get through the winter."

The next morning Bill came downstairs with a rush. "Betty," he yelled, "I've got it."

"You've got what?" she asked sleepily, breaking eggs into the smoking skillet, "the epizootic?"

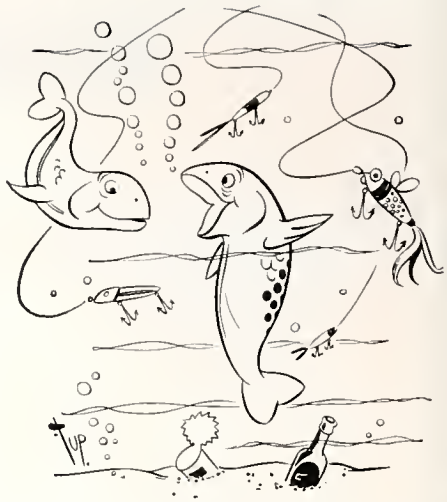
"I know how we can help. I know what we can do to save the alfalfa. We can irrigate it."

Hands on her hips, she turned to face him. "Are you crazy or something?" she asked flatly. "You know what one of those outfits costs? By the time you buy the pumps and the pipe and everything, a mere seven or eight thousand dollars is all."

"Sure it does, Miss Know-it-all, if you buy it," he teased. "We're going to make ours."

"All right, Mastermind, tell me how," she said, serving his eggs and sitting down beside him. Soon the two brown heads were close together as he diagrammed his plan on the oil cloth table cover.

"This hot wind has burned out our crops," he said. "Let it furnish the power to water them. After all, if you get water out of the ground with a windmill, why couldn't you get water out of the creek the same way? See," he drew eagerly, "first we take the tractor and dig out the water hole. More water will seep in to fill it. Some of the towns are doing it for their water



"Get a load of this. The guy who bought that one really got hooked."

systems; so could we. Then set up the old windmill over it, so the pipe would go down in the pool."

"But how would you get the water to the field, fly it?" she cried.

"Nope, Missy," he smiled. "I have that all figured out, too. You know the old one-room school house Dad bought when they reorganized the district and abandoned it? There's a lot of guttering on it. We'll cut willow poles and set it up on stilts to lead the water to the top side of the field. Then it will flow back down through the ditches we're going to dig and irrigate it."

"Well," she said, pushing back her chair, "what are we waiting for? Let's get the cows milked and get at it."

The next two weeks were filled with hard work, even for a farm boy and girl. The old windmill, whose well had gone dry years before, was in an upland pasture. While Betty drove the tractor and enlarged the water hole in the creek, Bill took the windmill apart, piece by piece. Most of the bolts were so rusted he had to cut them off with a hacksaw. Then, when he had most of the braces off, the whole thing collapsed and he had to make a flying leap to get away. Rolling with the fall, he escaped with only a skinned nose and a wildly beating heart.

With the parts hauled and dragged down to the creek bank, the chief problem was how to raise the corner uprights so that the cross braces could be rebolted in place. "If we only had a crane," he mourned, "it would be easy. We could just bolt the four side pieces together at the top and lift them up together."

"Do you suppose," said Betty hesitantly, "we could fasten a pole in that big oak tree so that it would stick out over the creek?"

"That's it," he cried. "I'll get the hay pulley and the ropes out of the barn. We'll cut a pole and raise it into place with the pulley. Then we'll

(Continued on page 40)

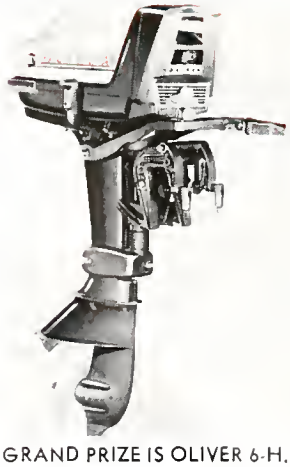
FISHING CONTEST

SIMPLE TO ENTER!

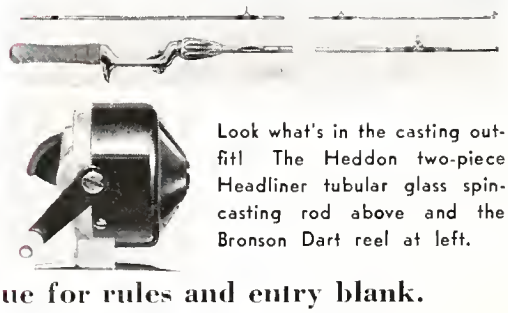
EASY TO WIN!

Casting outfits to the three top winners in each class! A bonus prize to the first 100 to enter!

EVERY ENTRY WINS A PRIZE

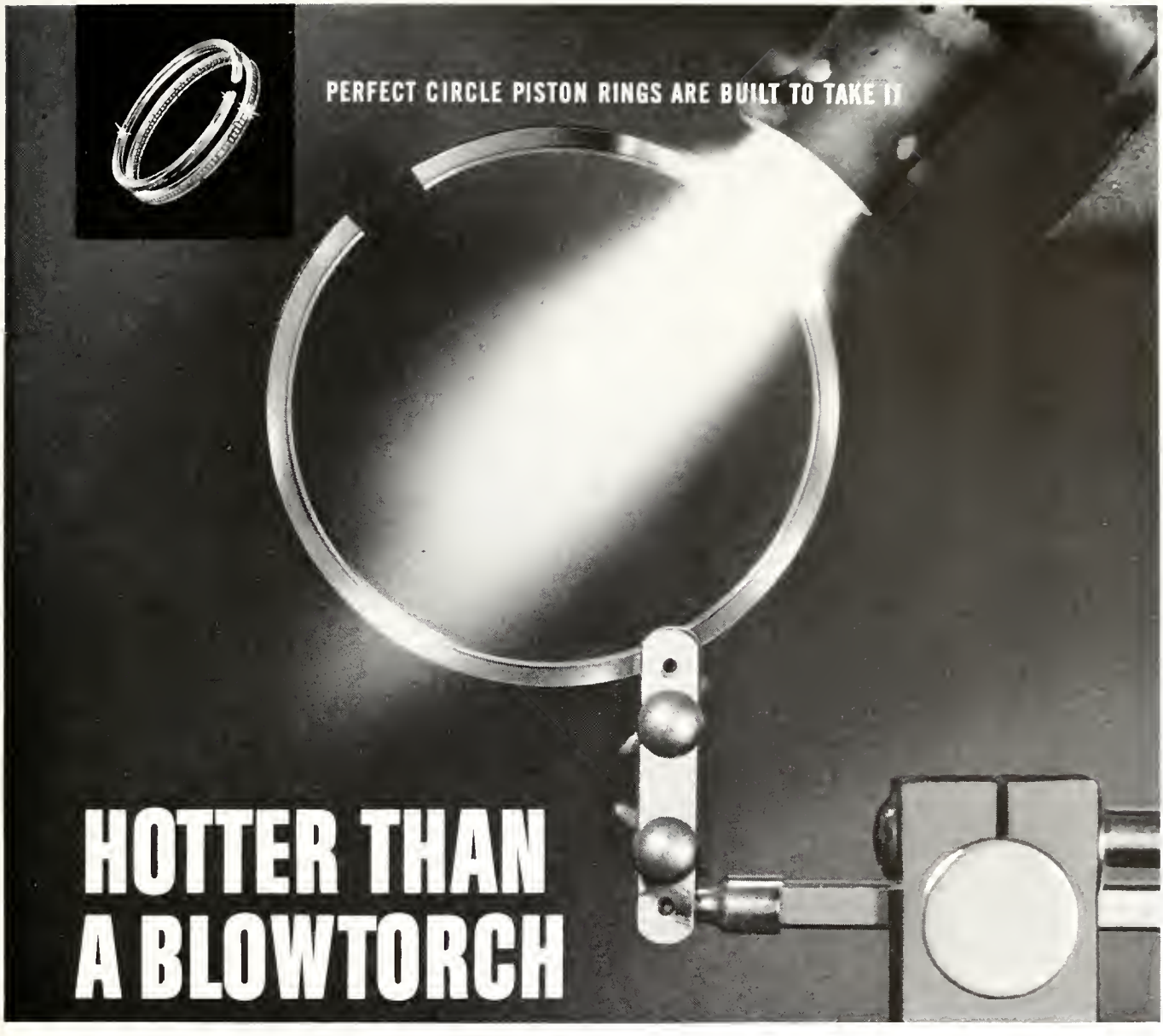


GRAND PRIZE IS OLIVER 6-H.P. MOTOR



Look what's in the casting outfit! The Heddon two-piece Headliner tubular glass spin-casting rod above and the Bronson Dart reel at left.

See your June-July issue for rules and entry blank.



The searing heat that's created inside engine cylinders causes inferior piston rings to lose their strength and resilience, and wear out far before their time. That's why Perfect Circle employs special metallurgical skills to produce ring materials that have the high heat stability needed for long life.

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HAGERSTOWN, INDIANA • DON MILLS, ONTARIO, CANADA

(Two-Step Windmill—Continued)

fasten the pulley on the end of the pole and raise our old windmill right up there."

By Sunday the twins were tired and stiff from the long, hard work. After church services, while folks were standing around in the church yard talking, they told Bill's ag teacher about the project. He listened with intense interest, then stood in frowning thought. "It's a wonderful idea, kids," he said, "and you have really been working. What about your pump?"

"The old windmill pump is shot, no good," Bill replied, "but we have a little pump in the cellar for times when water runs in. Can you imagine water in the cellar?" He turned to face the incessant hot wind.

"Well," the teacher said slowly, "it might work, but I doubt if it will lift high enough. A little pump like that will only lift about twenty feet. By the time you raise above the creek bank, and figure the slope of your field I doubt if it will be enough." Noting their crestfallen looks, he said cheerfully, "Don't give up the ship yet, mates. You have solved worse problems than that already. We will all think about it, and somebody will come up with the answer."

It was Betty who found the answer. That night, she said hesitantly, "Bill, if one pump won't work, will two?"

"What do you mean, Betts?" he asked.

"Couldn't we build a platform halfway up," she asked, "and put one pump there? It could pump out into something, a tub maybe. Then the other pump could go clear up in the top, with its pipe in the tub. Would it work, Bill?"

"Betts, old girl," he cried exultantly, "you're a genius, a natural born genius. Of course, it will work."

And it did work. The next afternoon Bill's ag teacher drove out to see the project. He had been born and reared in these hills before going off to the State University. These farmers had been his friends and neighbors all his life. To see them burning out, selling their ancestral homes and drifting to the city hurt him almost as badly as it did them. He was intensely interested in the project, for the possibilities it might hold for all his people.

There was no one in the farmyard or around the barn, so he opened the gate and drove down across the browned pastureland toward the creek. As he topped a little rise the windmill came into view. It was a sight to behold, something out of the fairy tales. Set slightly crooked, tilting a little to one side, it yet appeared to be firm enough. The big fan was whirring steadily in the strong, hot breeze. Halfway up the tower was a platform. On the platform were fastened a tub and a little pitcher pump. The little pump clanked madly in its effort to fill the tub. It was a vain effort, for up near the top of the tower was another pump, its draw pipe set in the tub below, its pump rod fastened to the swivel on the wheel above. It, too, was clanking madly and water was pouring from its spout to cascade in a steady shower down the tower framework to the pool below. Kneedeep in the pool, dancing and shouting with glee beneath the showering stream were Bill and Betty. Flinging the spray at each other they

(Continued on page 42)

and so is my new HARLEY-DAVIDSON TOPPER

Like father, like son... happy with the new Topper.

What a ride — gentle as a billowy summer cloud... with dual suspension and large foam rubber saddle. Dependability — plenty of get-up-and-go. Automatic *Scoot-away* transmission—no shifting or clutching needed.

Dad is sold on safety features like the large diameter wheels and sure-stop front and rear drum brakes. Tells everyone about Topper economy — up to 100 miles to the gallon.

Mom's a Topper fan, too! She likes its good looks: sharp, clean lines molded in tough beautiful fiberglass... two-tone color styling ...chrome-plated instrument panel.

See your Harley-Davidson dealer. He will arrange a fun-filled demonstration ride. Or send in the coupon for literature.

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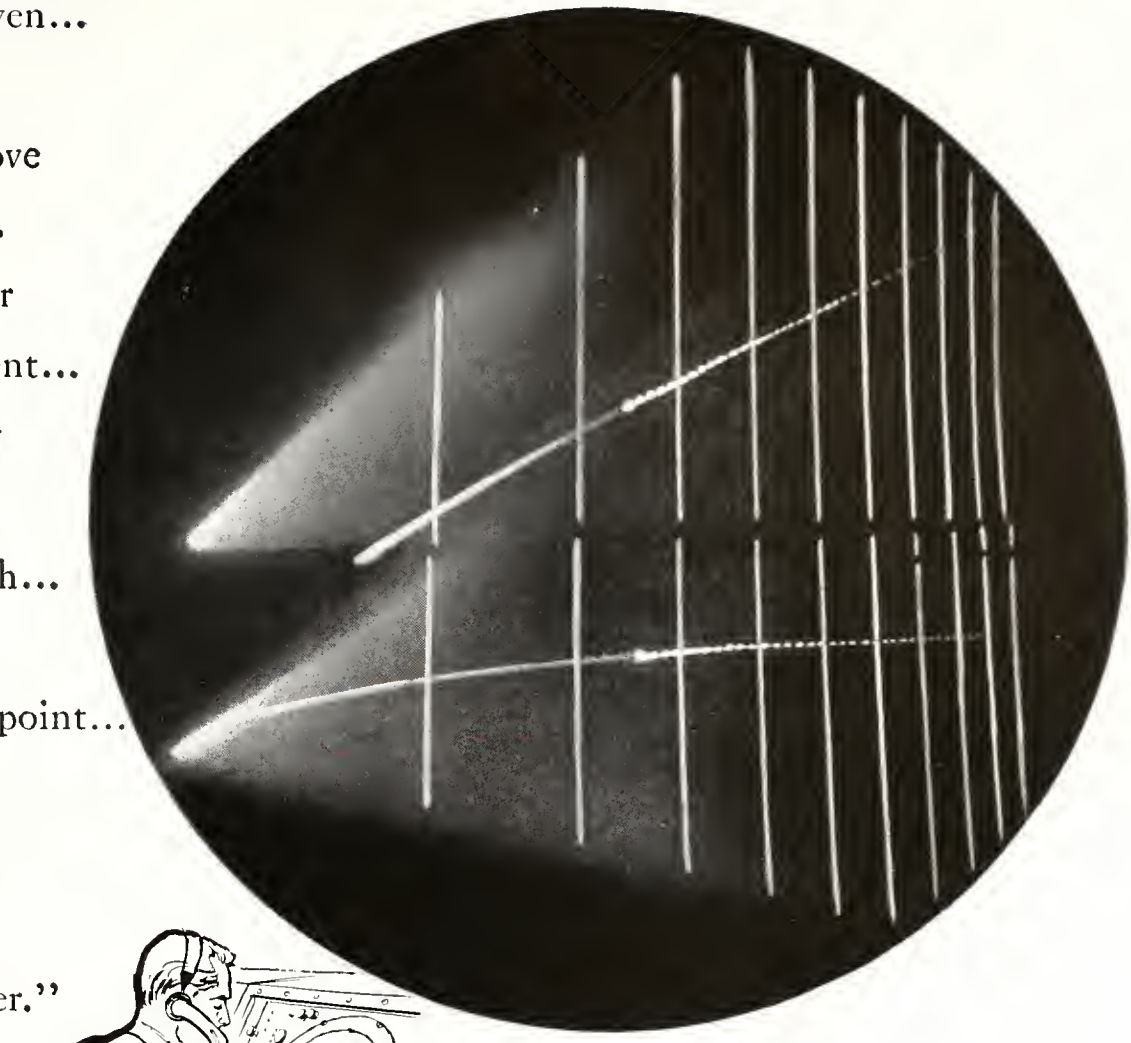
fifty feet above
glide path...
increase your
rate of descent...
you are now
on course,
on glide path...
over
touchdown point...
take over
visually for
landing and
contact tower."



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If your dealer can't supply you, mail check or money order for $13.50 direct to

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We agree to repair or replace free of charge, for a year, any WAHL product which does not give perfect satisfaction.

(Two-Step Windmill—Continued)

were shouting happily, "It works, it works, it works," as they danced about. Stepping out of his car, the teacher stood there and laughed until his sides ached.

Seated on the bank beneath the shade of a scrub oak, the twins clothing dried quickly in the hot breeze while the ag teacher talked. "You have really done a job, kids," he marveled. "I wouldn't have believed it. But you still have problems, big ones." Their faces sobbered quickly. "First," he asked, "how will you get the water to the top side of the field?"

Bill and Betty quickly explained their plan. He nodded. "It should work," he said slowly, "but I imagine that old schoolhouse guttering is pretty rotten by now. Let's see," he figured swiftly in a notebook, "new pipe to reach that far should cost about forty dollars."

"Wow," Bill said, "we don't have that kind of money. Looks like we're sunk."

"Slow down," Bill," he said. "In a way what you are doing here is an experiment. If it works for you it should work for others. Tell you what," he said decisively, "I'll back your bill for the pipe. You go to the lumberyard and get it when you're ready. As I see it," he continued, "you have two other main problems. You'll need about three sets of irrigation channels to cover the whole field with that small a supply of water at a time. I can help you lay them off, but you will have to dig them."

"Oh, more work," said Betty, ruefully flexing her labor stiffened back. "But if it works it will be worth it," she grinned.

"The second is this," he continued. "You will need a greater immediate volume of water than those pumps will give you. Your water would just soak in around the end of the pipe and not reach the rest of the field."

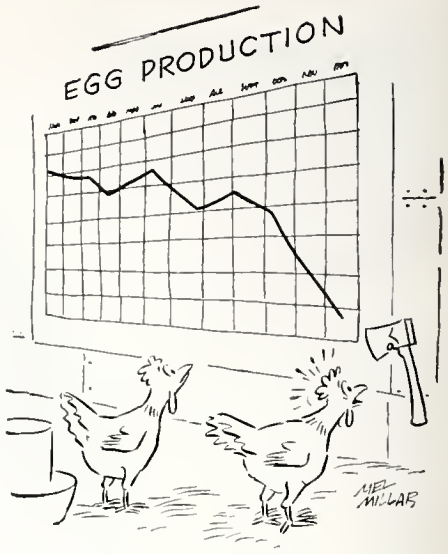
"Oh, no," Bill protested. "Don't tell me all this work has been for nothing."

The three sat silently, trying to find a solution. Minutes passed while the brown leaves overhead rustled in the breeze. A red-winged Blackbird, reassured by the quiet, dipped down to the pool and splashed noisily in the shallows.

"I've got it," Bill shouted, and the blackbird took off. "If we had a tank up there to hold the water until we had enough volume, would that do it?"

"It should," his teacher said, "but how would you let the water out of the tank fast enough?"

"We have an old two hundred gallon water tank with a hole rusted in the side," Bill replied. "Couldn't we put a pipe or something, an old drain tile maybe, through the hole and cement it in? Then we could set a board in front of the hole in the tile until the tank



filled with water. When it was full, presto, yank out the board and out comes the water."

"Good boy," the ag teacher said, slapping Bill on the knee. "You have it whipped now, except for the work of setting it up." Bill groaned in mock despair. "You get your poles set up and I'll help you put up the pipe so you'll get the proper down grade. Then we will lay out the irrigation channels and all you will have to do is dig them."

"All," the twins groaned in unison.

"Yep, that's all," he laughed at them and got up to leave. "I'll see you about Wednesday, so you had better get to work."

By Wednesday the poles were set, marching in a fairly straight line up across the alfalfa field. Bill had labored mightily on the forested ridge above, selecting trees of the proper size, cutting them down, and trimming them. With the tractor Betty had snaked them down to the field. Together they dug the holes and set the poles. With the teacher's help they fastened the new pipe to the poles so that water flowed out at the high side of the field. Then, with his transit, he laid out three separate systems of channels, spreading out across the field. All were to connect with a main ditch at the high side of the field. He showed the twins how, with a few shovels full of dirt, they could seal off two of the channels, flooding all the water from the tank down one so that it would carry clear to the lower end of the field.

On Saturday morning the last channel was finished, and the tank was set in place. Shouting in triumph the three watched the first rush of life giving water down across the field. Three times that day the tank refilled. Three times the tank was emptied, so that the whole field received water. By nightfall the pool in the creek was low, so Bill shut off the windmill. The next morning seepage had refilled the pool.

(Continued on page 46)

Tell him how to cut milk production costs

As you know, the housing of dairy cows is a major expense in milk production. Naturally, farmers are quite interested in cutting this expense. U.S. Steel, in cooperation with the University of Wisconsin, studied the problem in *The Dairy Barn Research Project*. The findings were reported to farmers across the country and after a trial period here is what they are finding: a loose housing system makes the most economical and efficient type of dairy operation. Milk production cost per cow goes way down because loose housing saves time, labor costs and capital investment. And the herds stay a lot healthier, too, because a loose housing system is much easier to keep clean.

It's a good idea to have farmers visit operating loose housing systems *before* they decide to switch to loose housing. This will give them a look at how it works and what they'll need to make it successful.

For complete information, have farmers send for U.S. Steel's free book, *Loose Housing*. United States Steel, Agricultural Extension, 525 William Penn Place, Pittsburgh 30, Pennsylvania. *USS is a registered trademark*

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MR. ADVISOR:

What's the meaning of the phrase. . . *"honor rural opportunities and responsibilities"* which we use in our opening ceremony?

Louis J. Gombosi, Advisor
Newton, New Jersey

AS A PART of rural opportunities, we must include the career opportunities which exist in the agricultural field. Agriculture is the nation's biggest single industry with an investment well over 170 billion dollars. It employs 40 percent of the 65 million workers in the nation. There are unlimited opportunities for vocational and college trained graduates. The young people who receive training in agriculture have a direct responsibility of maintaining our standard of living, keeping us the best-fed people in the world as well as helping to solve the food problems for the underfed areas of the globe.

People living in rural areas can take advantage of existing educational opportunities such as vocational agriculture classes, young and adult farmer programs, extension service, soil conservation service, and the many commercial farm specialists and programs. These opportunities will enable them to better their own status.

There are also many opportunities which exist through membership in the various farm organizations and cooperatives. Membership in these organizations is desirable. It carries with it the responsibility of leadership in the furthering of the aims and objectives of the particular group in the betterment of agriculture and rural living.

In rural areas you have the opportunity of living close to nature and the land. Your responsibility is to conserve the soil and all its natural beauties and abundance for future generations.

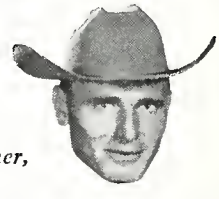
It is difficult to separate opportunity and responsibility, for with one comes the other.

Alfred Wm. Hansen, Advisor
Lovelock, Nevada

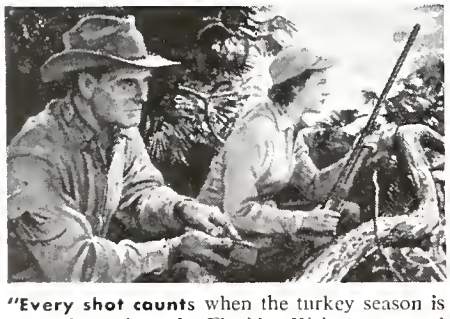
SINCE MECHANIZATION has enabled agriculture to crowd more than 200 years of progress into the last ten, rural people have more leisure time. Because we have not yet learned to use this leisure time wisely, thousands of teen-agers have nothing to do to gainfully employ their time. Juvenile delinquency is on the alarming inerease, as evidenced from a recent statement by J. Edgar Hoover, that "teen-age crime

PETERS POWER

"...gets tough with turkeys"



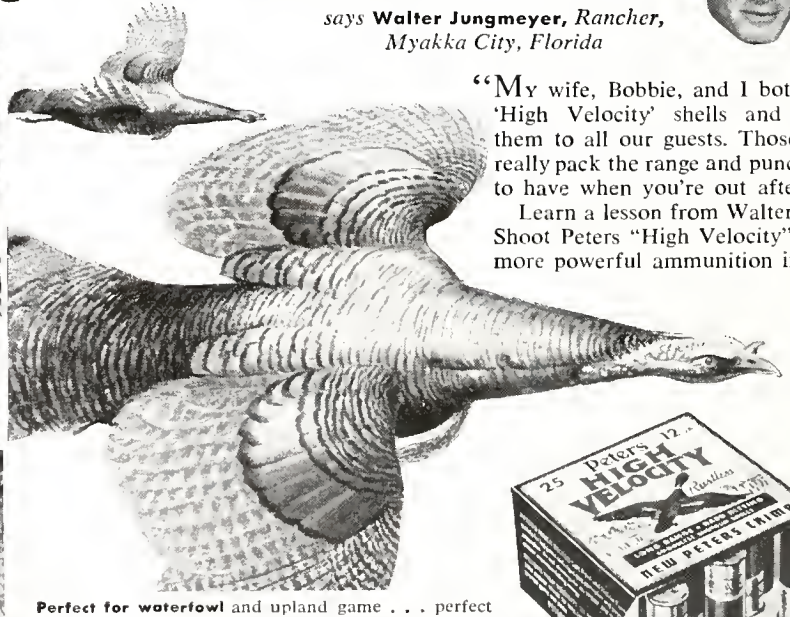
says **Walter Jungmeyer,** *Rancher, Myakka City, Florida*

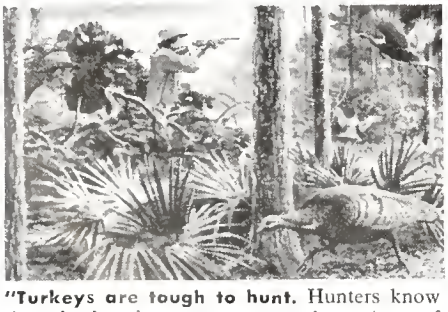


"Every shot counts when the turkey season is open down here in Florida. We've got good cover for wild turkeys on my 10,000-acre ranch and have had quite a lot of experience with these wary game birds."

"My wife, Bobbie, and I both use Peters 'High Velocity' shells and recommend them to all our guests. Those blue shells really pack the range and punch you've got to have when you're out after gobblers."

Learn a lesson from Walter Jungmeyer. Shoot Peters "High Velocity"—there's no more powerful ammunition in the world!





"Turkeys are tough to hunt. Hunters know that they're the most wary and cautious of game birds. They're on their guard all the time, and any little noise or movement will spook them."

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"Here by the Owl"

Alfred Wm. Hansen

is the most pressing problem in America today."

Our first big responsibility is to wisely put our leisure time to work at something constructive. Any FFA member who is following the supervised farming program—which he has helped plan in the presence of his vo-ag teacher and his parents—does not have time to become one of the statistics to which Mr. Hoover referred. But this is not enough. Every FFA member must consider it an honor to set an example before his associates and assume leadership for doing something constructive with leisure time.

Our second big responsibility as Future Farmers is to help work out a solution to another rural problem. We are losing 1¼ million acres of our best agricultural land each year to new residential tracts, industrial sites, business developments, and super highways. For each mile of new super highway, nearly 73 acres are taken out of agricultural production. Many clover-leaf intersections take as much as five acres each. In addition, our conservationists tell us that over one-fourth million acres are lost to agricultural production through erosion each year. These facts point out that in the years ahead, fewer acres will be available to produce the food and fiber for an ever increasing population. A great responsibility rests with each Future Farmer to honor the challenge which he faces in helping to solve these rural problems.

Another responsibility of FFA members is to honor the heritage that is ours by virtue of our rural birth and living. We can be proud because we have been given the privilege of a rural birth. We have been reared in the greatest agricultural nation upon the earth, and above all, we should be thankful for the privilege to be near the soil which provides all people with the "bread of life." Yes, we have a great responsibility to honor our heritage of rural birth and living.

Last, but not least, we have a rural responsibility to the church of our choice. Our responsibilities to ourselves, our rural communities, our families and our nation, are but a small part of honoring responsibilities which we have to our Father in Heaven. Remember the character qualities of honesty, integrity, charity, humility, brotherly kindness, honor for our father and mother, virtue, temperance, and patience are all qualities to which there is no dollar sign attached. These can only be obtained through polish given to our inner souls by attending and actively participating in the responsibilities that are ours to honor at the rural church of our choice.

More than a century ago, the French philosopher, Alex de Tocquerville, wrote of our new American democracy, "America is great because she is good and if America ever ceases to be good, America will cease to be great." Paraphrase this statement by substituting the words "The FFA" for "America," and at the same time think of the rural responsibilities that we, as FFA members, take upon ourselves to honor each day of our lives.

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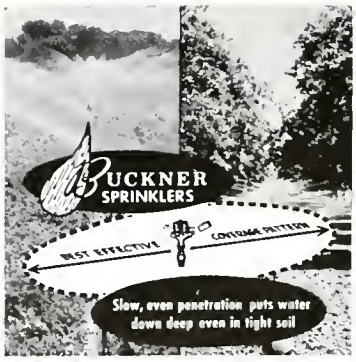

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*Pat. Pend.

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(Two-Step Windmill—Continued)

Sunday morning the twins were so tired and so sore that they slept late. They missed Sunday school but they did get there in time for church. When they came in the ag teacher winked companionably at them. Together they shared a great secret. At his suggestion they had told no one of the project. "Better wait," he said, "and see if it works. Try it a week. Then if it still works we'll notify your dad."

The next week most of their time was spent with the new water system. They milked early in the morning, then went to the creek to start the pump. Quickly they learned how to guide the life giving waters from one section of the field to another. It was amazing how, with plenty of water, in the hot sun the alfalfa began to green and grow. Each night they climbed the tower and Betty held the lantern while Bill replaced the leather of the pump valves. The little pumps had not been made for such heavy, continuous work, and the valves wore out in a day's time.

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On Friday, the teacher, who had been out daily to look at the growing, greening field, suggested, "Better send for your dad. I think the system has proven itself and I'm going to write it up in the county paper. He has a right to know first. Why don't you wire him?"

Together the two brown heads bent over the yellow telegram blank. "Dear Dad Stop Your help urgently needed put up hay Stop Come at once Stop Bill and Betty." "Ten words in the message exactly," Bill grinned. "Send it off."

A much puzzled William Sullivan received the telegram at the filling station where he worked. How could there be hay to put up when the hay crop was dead? Hurriedly he arranged for leave from his job and dashed back to his room to pack. He caught a midnight train for his home town, wiring ahead of his coming.

The ag teacher met him at the station. To all his questions and demands he would only reply, "Wait and see." Silently they drove out the dusty gravel road. Reaching the farm, they drove right on through the yard and into the pasture. When they topped the little rise he stopped the car. From horizon to horizon the land was brown, brown woodland, brown, lifeless corn fields, seared brown pasturelands. But immediately below, the alfalfa field shimmered green and glistening in the sun. Quickly the ag teacher explained as they drove on down the hill. "You should have," he said, "enough hay to carry your herd through the winter. Then you should have good fall pasture."

"Thank the good Lord," William Sullivan cried as he threw his arms tightly about the shoulder of the ecstatic twins.

"Yes," the ag teacher said drily, "thank the good Lord for a pair of kids with the energy to use the brains and the imagination He gave them. Who would ever have thought," he shook his head wonderingly, "of a two-step windmill?"

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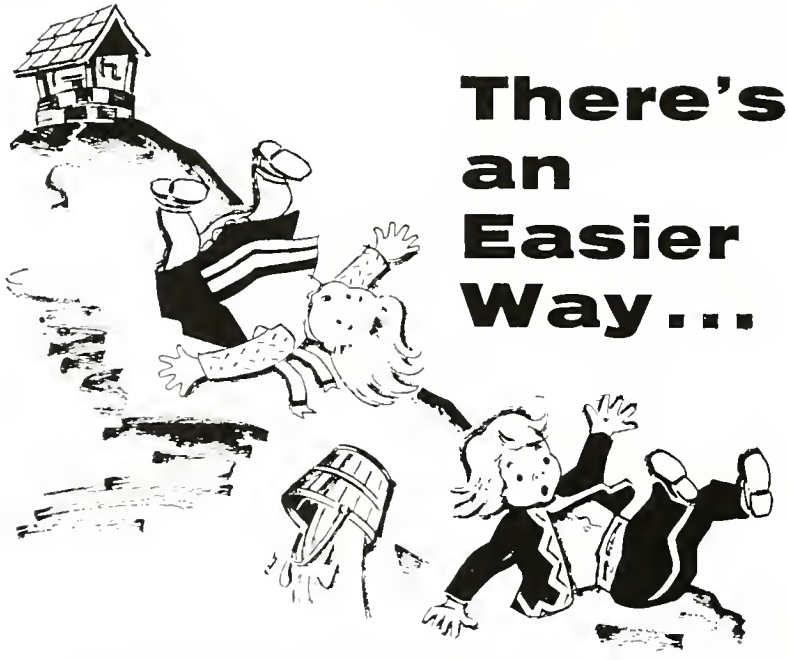

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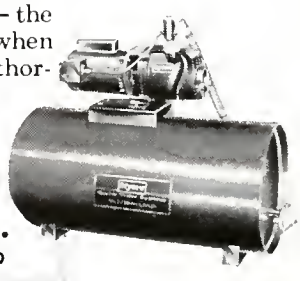

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In laboratory, Jimmy Warner weighs a soil sample while Tony Wilder, background, determines soil's pH.

MOULTRIE, GEORGIA

(Continued from page 21)

their share of honors as a Chapter. At the 1953 Convention the Chapter was awarded the bronze emblem and the next year a silver emblem. For the next three years, members came home from the Convention with the gold emblem; and, in 1958 and 1959, the silver emblem.

Among the trophies hanging in Webb's office is the Georgia Cooperatives Activities Award given by the Cotton Producers Association to the chapter carrying on the best study of types of businesses. The Chapter was one of four in the nation during 1958 to receive the chapter leadership award.

The livestock judging team placed first in Georgia during 1956 and then brought home a silver emblem from the National Convention. The Chapter has won many other state and district honors.

The Future Farmers find time for more than work. They have their own team that competes in the county basketball league. Recently, they defeated one of the high school teams in a game that was supposed to be a "warmup" for the regulars.

Moultrie is one of the few that conducts soil and seed germination tests in its own laboratory. The members learn how to test soils for determining the kind of fertilizer to use. They also run demonstrations on the waterholding capacity of soils.

Not only does Moultrie have one of the largest chapters in the world, it has one of the most active!

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66—Rat and Mouse Control—Guide and Fact Book, and **Mice in Buildings:** a double barreled offering to help you fight a continuing problem on the farm. These are two good books on the subject—40 pages of important information. You can also get ideas here for a chapter community service project or material for a public speaking contest. (Wisconsin Alumni Research Foundation)

67—The Way Cows Will Be Milked on Your Farm Tomorrow—here is a gold mine of the latest dairying ideas. Young dairymen looking for practical help on a streamlined milking system can get it in this 32-page planning book. If you are going to change or fix up your present milking operation, get this book. It offers many good suggestions. (Babson Bros.)

68—Judging Engine Quality is a book to consult if you are in the market for a new tractor or an auxiliary engine for your farm. It points out the features, found in the various diesel engine designs, which provide you with top performance at minimum cost. It gives you the five most important factors to consider in determining the quality of the next engine you buy. (Caterpillar Tractor Co.)

69—Why and How to Fence for the Future—this book will make a valuable addition to your farm bookshelf. The 26 pages of information in this book contain the best in fencing ideas. From building a cattle guard to erecting an electric fence—*this book has it.* (Sheffield Div., Armco Steel Corp.)

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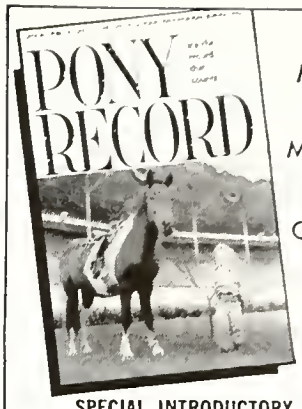

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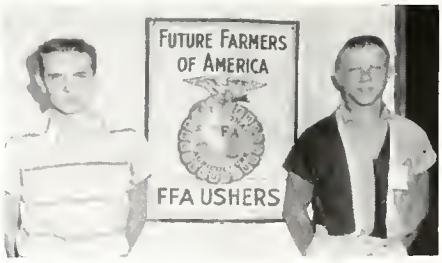


Ushers Wendell Gray and Everett Hinrichs report for their FFA T-Shirts.

FFA USHERS

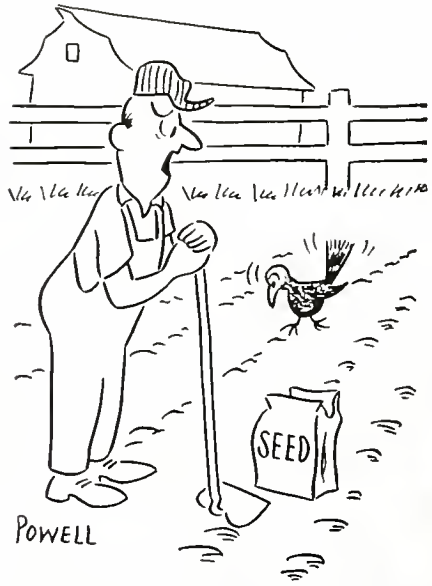
IOWA STATE FAIR visitors don't have to spend time looking for grandstand seats. For the past 10 years, a staff of FFA ushers has handled the chore.

This year, 81 ushers from 45 chapters participated in the goodwill work. Fair officials provide dormitory space and FFA T-shirts for all ushers and send them through a short course in courtesy, conduct, seating, and general public relations.

H. T. Hall, Iowa supervisor of agricultural education, says the plan has worked extremely well. Ushers are selected before the annual fair begins to allow preliminary briefing at their home chapters.

Iowa State Fair officials like the plan. "The gentlemanly attitude of FFA members has eliminated all problems in the tremendous job of seating visitors for morning and evening performances at the grandstand," they report.

This unique program is improving public relations for the Iowa State Fair and the State FFA Association. Besides that, it's mighty convenient for tired Iowa sightseers.



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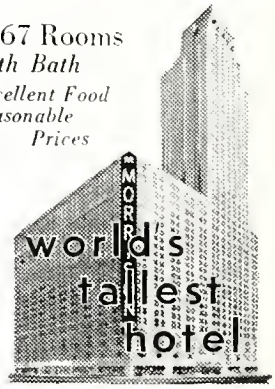

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Nov. 25-Dec. 2, 1950

By Stan Allen

THE SCOREBOARD flashed the final score, Washington Senators 10, Boston Red Sox 1. This was the result of the 1960 American League opener. Winning pitcher was Camilo Pascual who notched 15 strikeouts, a new club record, in this three-hit win. Boston's run was a homer by Ted Williams who credits Pascual as one of the best pitchers he has seen.

Twenty-six-year old Pascual hails from Havana, Cuba. His one ambition was to be a major leaguer and with a year-round season in Cuba he was able to get in lots of practice. His older brother Carlos had a tryout with the Senators and although he didn't make the team, he was Camilo's idol. Camilo tried to copy his brother's style.

Pascual was spotted by Washington scout Joe Cambria in '51, playing as an infielder. Cambria liked the way he threw and thought he could be a pitcher. Camilo didn't like the idea because he would not get to hit as much but he couldn't pass up the chance. He was sent to Big Spring, Texas in '51 but after seven games he finished the season with Chickasha and Geneva. In all, he had eight wins and three losses that year. After a ten and six record for Havana in '53, the Senators thought he was ready for the majors.

He joined the Senators in '54, when just 20 years old. Used mainly in relief, he appeared in 48 games for a four win and seven loss record. His whole game fell apart in '55 as he won only two against 12 losses. In '56 he could not find his trouble and won only six games, losing 18. He was a better pitcher than this indicates as he had 162 strikeouts. Camilo had all of the tools of his trade: a good fast ball, a good slider, and the best curve ball in the league—yet he couldn't win. It was suspected that his temper might be most of his trouble. Giving up a hit, he would try and blaze the ball by the next batter which often ended up as a home run.

In '57 he won eight and lost 17 with 113 strikeouts. He was consistent in '58 with eight wins and 12 losses and struck out 146. His earned run average dropped both years but last season he seemed to find himself. Controlling his temper, he began to use his head as well as his arm to pitch. A fast worker at first, he now takes more time than most pitchers.

He won 17 and lost 10 in 1959. With a first division club he could have easily won 25 and he had two games without a run from his teammates and six other games in which they couldn't score more than three runs. He hurled a one hitter, a two hitter, a three hitter, and five four hitters. He led both major leagues with six shutouts and his 17 complete games led the American League. His 2.64 earned run average ranked second in both leagues.

His control was good as he walked only 69 batters in 239 innings—less than 2½ walks per nine inning game. His 185 strikeouts were good for second place league honors and the highest total for a Senator since Walter Johnson's 188 in 1917. He allowed only 10 homers in 32 games last year.

Pascual's .630 win percentage was topped by only five American League pitchers, all with first division clubs. He was the best fielding pitcher in both leagues, handling 73 chances without an error and led the league's pitchers in hitting with 26 hits and a .302 batting average.

His 2.60 earned run average at the half way mark this year ranks sixth in the league. He has seven wins against four losses although he has been out with an injury. His 91 strikeouts so far is second to Jim Bunning of Detroit who has 99 in 116 innings. Pascual has pitched only 83 innings. He was named to last year's American League All-Star Team and is the only Senator to get the honor this year. He had nine votes in 1959's poll for the Most Valuable Player award.

Just beginning to gain stature as a pro pitcher at 26, Pascual should add many marks to the record books and reap the honors that go along with them.

Ace curve ball specialist for the Washington Senators, Camilo Pascual.

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The First One Doesn't Have A Chance!

"Don't you ever get tired of whittlin'?"

Big Brother: *"The bullets were flying all over the place, but I kept right on doing what I was doing."*

The awe-stricken younger brother could hardly summon the breath to ask, *"What were you doing, Albert?"*

Big Brother: *"Running."*

Thomas Peterson
Glasgow, Kentucky

Clerk: *"What do you want for a dime —the earth with a whitewashed fence around it?"*

Little Girl: *"Let me see it, please."*

Michael Swanda
Carnegie, Oklahoma

The *Houston Post* reports that a Texas oilman returned from Europe with a new Jaguar for his nine-year-old son. When the neighbors exhibited alarm, he said: *"Don't worry, we're only going to let him drive it inside the house."*

Dorothy Mealman
Ruthton, Minnesota

A scientist invented a serum to bring inanimate objects to life. Secretly he tried it out on the status of a general in a park. Sure enough, the general gave a quiver and climbed down from the pedestal. The scientist was overjoyed.

"Tell me, general," he asked, *"what's the first thing you're going to do in your new life?"*

"That's easy," rasped the general, jerking a gun from his holster, *"I'm going to shoot several thousand of these pigeons."*

Billy Bilger
Conway, Missouri

"How did you make your neighbor keep his hens in his own yard?"

"One night I hid half a dozen eggs under a bush in my garden and next day, I let him see me gather them."

Ernest Miller
Lansing, Michigan

One skeleton to another as they were climbing a steep mountain: *"Let's sit down and rest our bones."*

Ronnie Robbins
Inman, South Carolina

Sign on rocket pilot's door: *"Out of this world. Be back in fifteen minutes."*

Paul Martin, Jr.
Bakersfield, Missouri

"Man, I've got so many troubles that if anything happens to me today, it'll be at least two weeks before I can worry about it!"

Albert Snyder
Eldorado, Ohio

News Report: *Attention all cars going north and south on U. S. Highway 30—U. S. Highway 30 runs east and west.*

John Williamson
Logansport, Indiana

Wife: *"I don't understand that new family—no car, no TV, no furs, no jewelry, not even a dishwasher."*

Husband: *"Yes, poor people, I hear all they have is money."*

Junior Swabe
Sweetwater, Tennessee

"Look Junior! Remember that seed you threw in his hair?"

Professor: *"Give me an example of how science has helped business."*

Student: *"Well, the law of gravitation has helped promote the sale of suspenders."*

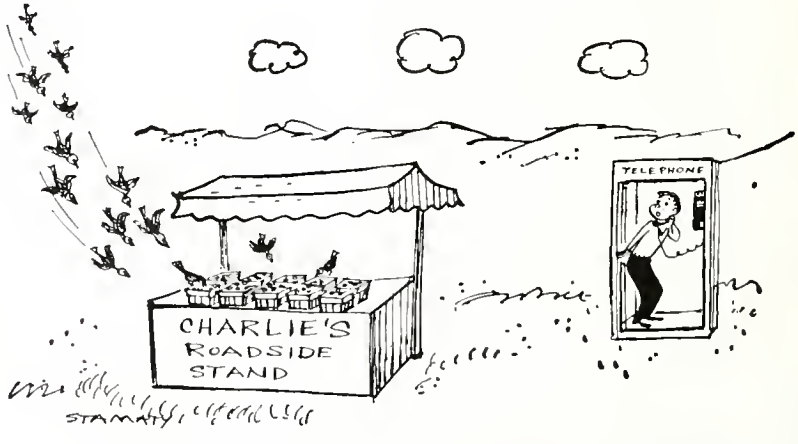
Sharon Spiering
Forest Grove, Oregon

A husband was teaching his wife how to drive when the brakes suddenly failed on a steep downhill grade. *"I can't stop,"* she shrilled, *"what will I do?"*

"Brace yourself," said the husband, *"and try to hit something cheap."*

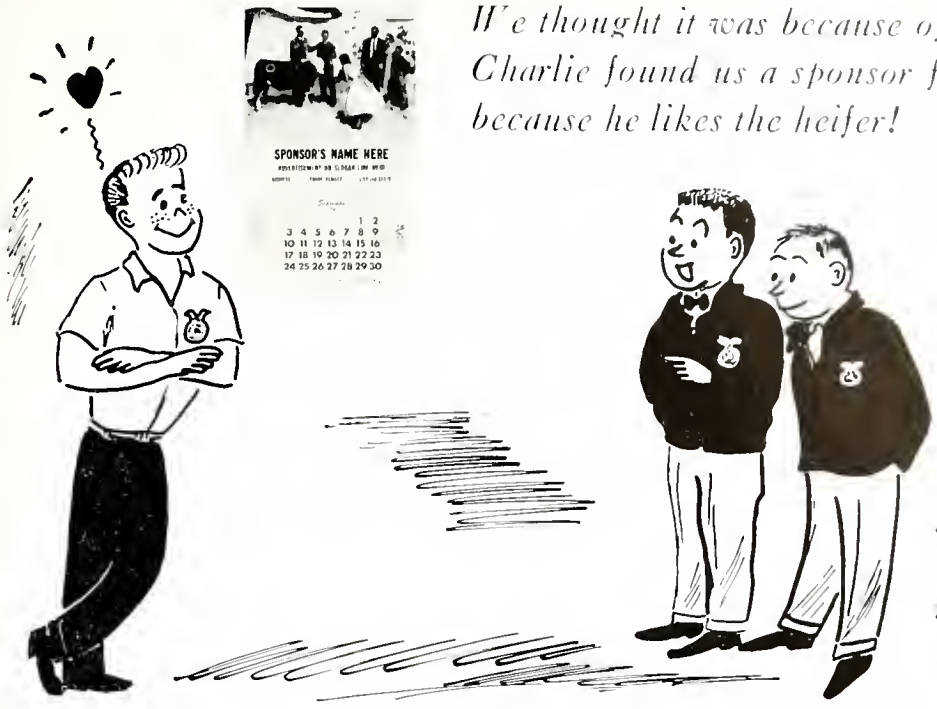
Noel Poe
Holyoke, Colorado

Charlie, the Green Hand



"I've got to hang up. A crowd's gathering at my stand."

The National FUTURE FARMER *will pay $1 for each joke published on this page. Jokes should be submitted on post cards addressed to The National* FUTURE FARMER, *Box 29, Alexandria, Virginia. In case of duplication, payment will be made for the first one received. Contributions cannot be acknowledged or returned.*



We thought it was because of the girl, but actually Charlie found us a sponsor for the FFA Calendar because he likes the heifer!

. . . At any rate, the 1961 Official FFA Calendar will be hanging in our community. . . .

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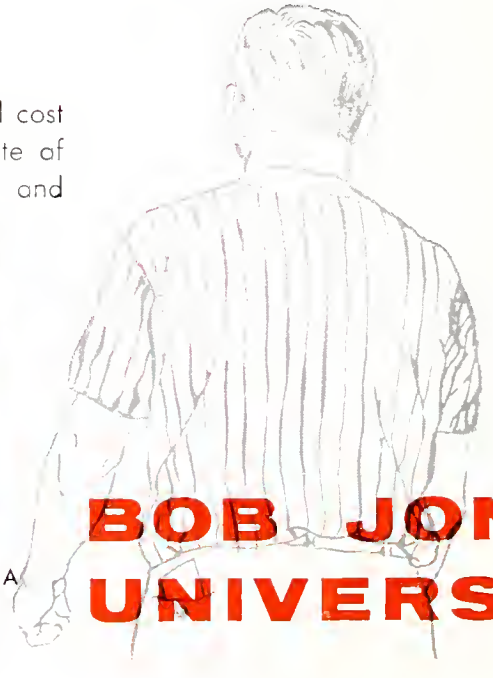

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